SCHOOL LIFE

Official Journal of the . . .

OFFICE OF EDUCATION

SCHOOLHOUSING SURVEY
George J. Collins

NONPUBLIC SCHOOLS
Diane B. Gertler

OCTOBER 1963

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The dropout campaign

An exchange of letters between President Kennedy and Commissioner Keppel: the President's letter on the next page was in reply to Mr. Keppel's memorandum below.

Memorandum for the President
September 5, 1963

Preliminary reports from school superintendents on the Summer Dropout Campaign supported by your allocation of $250,000 show that thousands of potential school dropouts agreed to return to school for the term that started this month. Figures do not tell the full story; benefits to the individuals involved and to their communities go beyond mere tabulation.

The $250,000 fund was distributed, in allocations ranging from $300 to $20,000, to 63 communities in 23 States and the District of Columbia. First reports from 20 cities indicate that—

30,411 probable dropouts were identified.

Counselors talked to 23,502, or more than two-thirds of those identified.

10,105 young people, or nearly half of those reached, agreed to return to school.

Since the funds can be used for activities through the end of September, final reports from participating school systems are not expected until the end of October.

Typical of the response of educators on Federal action was this from one superintendent: "It has been a real morale booster for our staff to learn that the Government can move so rapidly and our first project was launched . . . with high enthusiasm."

Miami, Florida, where preliminary activity was accomplished with Manpower Development and Training Act funds, is a good example of campaign results. Of 4,800 potential

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • ANTHONY J. CELEBREZZE, *Secretary*
OFFICE OF EDUCATION . . . FRANCIS KEPPEL, *Commissioner*
MARTIN MAYES, *Acting Director, Office of Information*

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dropouts identified, campaign workers contacted 3,000, and 1,600 said they would return to school.

Particularly interesting and encouraging was the response of many parents who expressed gratitude for the personal approach in the campaign—the feeling that "somebody really cares." In some cases, parents themselves indicated interest in furthering their own education and training on the basis of information given them. They contrasted the personal contact effort with previous campaigns conducted primarily through mass media and mailed materials. . . .

Counselors reported the youths contacted were more receptive than in the past and showed more favorable and positive attitudes toward school than expected. Excellent cooperation was reported from all community segments—State and local welfare agencies, the press, radio and television, religious organizations, business, labor, civic groups, and the general public. Many reported that the program helped to strengthen relations between school, community, and home.

School systems are planning curriculum changes and special programs tailored to the needs of dropouts. These will be key efforts in continuing follow-up programs to keep students in school until they have completed their education. Past experience indicated that 400,000 young people might not return to school this fall and that as many as 700,000 more would probably leave during the school year.

Dr. Ellen Winston, Commissioner of the Welfare Administration, reported in mid-August that public welfare agencies in 33 States and the District of Columbia had responded to her request for special drives to keep needy teenagers in school and that replies from additional States were being received daily. Final reports are expected by the end of this month.

FRANCIS KEPPEL
U.S. Commissioner of Education

THE WHITE HOUSE

September 15, 1963

Dear Commissioner Keppel:

I have read with great interest your memorandum of September 5 supplying preliminary data on the intensive campaign waged this summer to prevent school dropouts and to encourage our young people to secure the highest possible level of education and training. It is gratifying that over 10,000 young people in 20 cities who were identified as probable dropouts indicated they would return to school.

These impressive figures are the result of the joint efforts of counselors, school superintendents, local officials, the U.S. Office of Education, the Advertising Council, radio and TV stations, newspapers, welfare workers, and private citizens throughout the country. All who participated deserve the thanks not only of the thousands of students who will lead richer and more productive lives but the entire Nation.

Your observations regarding the need for a continuing program to ensure that those who have returned to school this month will remain there are obviously sound. Certainly the same intentive effort should be directed towards that goal, and the Federal Government should, of course, do everything within its authority to encourage such efforts.

In addition, I would hope that the experience and understanding of the problem gained this summer will enable the schools and the Government to make the necessary preparations for an even more effective program next summer and in the years to follow. Your report demonstrates, in an impressive manner, that a comparatively modest expenditure of funds, coupled with wide public interest, can bring really dramatic results in reducing school dropouts.

Sincerely,

JOHN F. KENNEDY

Notes on the Notable

FEDERAL PROGRAMS AND ACTIVITIES

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Schools proposed as sites for fallout shelters

BECAUSE MANY OF the Nation's largest and most substantial buildings are located in business districts and industrial areas, a large percentage of the nearly 100 million fallout shelters already identified by the Office of Civil Defense of the Department of Defense are in office and industrial buildings. This means that there are relatively few shelters in residential areas. The OCD believes that one possible solution to the problem of providing shelters in residential areas is the use of schools. For the most part schools are located in residential areas and are usually among the largest and most substantial buildings in an area.

According to a survey made by architects and engineers for OCD, 18,515 school plants now offer 7 million approved shelter spaces. An additional 5.8 million shelter spaces could be made available in schools by the improvement of ventilation systems alone. But shelter spaces would still be needed for 53 million students and faculty members.

To alert the States to the problem and to discuss the possibilities of incorporating fallout shelters into existing school buildings as well as into new ones, the OCD and the Office of Education sponsored a 3-day training course in June for school building officials of State departments of education. Chief State school officers from 48 States, the District of Columbia, and Puerto Rico sent representatives. Staff members of the two Federal agencies discussed the basic facts of nuclear weapons, means for protection against them, the logic of the shelter program, and the use of schools as shelters. They explained the elementary principles of building design which offer suitable shelter. Officials also explained the shelter program now being considered by the Congress. Under the provisions of the proposed legislation, public buildings, including schools, would be eligible to receive Federal support for the parts of construction which contribute to shelter capacity.

730 in this year's teacher development program

ON THE LAST DAY of August 266 teachers and school administrators from 70 nations and dependencies began 6-month training programs under the teacher development program administered by the Office of Education in cooperation with the Bureau of Educational and Cultural Affairs of the Department of State. After a 2-week orientation program in Washington, which introduced them to life and education in the United States, the educators were assigned, according to their fields of specialization, to 11 colleges and universities for 3-month seminars. They are now at these institutions studying school administration, elementary and secondary education, vocational education, science teaching, the teaching of English, and American civilization. Around the first of the year they will be assigned through State departments of education to private homes in about 300 selected school communities (some will visit more than one community) for visits to schools and civic projects.

The Office is also arranging short-term and special programs for 464 other educators from these and other countries. In all, a total of 730 educators from 74 countries and dependencies will participate in the 1963–64 program. Many of these educators will also attend seminars and visit communities in the United States.

Since the program began in 1944, more than 5,500 educators from 85 countries have taken part. The object of the program is to create an "atmosphere of mutual understanding and respect among educators" in the countries of the free world.

Project on coordinating library statistics established

The lack of standardized practices and terminology among libraries has been a handicap to researchers and librarians alike. To make research on libraries meaningful, the American Library Association, with the assistance of the Council of Library Resources, Inc., and several Federal agencies, is sponsoring a project to establish a national system of standardized library data collection for use in administering libraries and conducting research. The project has received two grants—$48,960 from the council and $5,000 from the National Science Foundation. In addition, the National Library of Medicine has made office space and equipment available to the project staff.

The project will coordinate statistics on all types of libraries, both national and local, and will define general and specific terms. Present plans call for the compilation of a list of cooperating organizations and a checklist of basic items, definitions, and useful classifications in statistical fields, the preparation of a handbook, and the planning of a national program of library statistics.

The administration division of the American Library Association will conduct the project. The project director is Joel Williams, chief of the Operations Section, Division of Educational Statistics, Office of Education, who is on a year's leave of absence from the Office.

Users of statistics compiled by

the project will include school, college, university, public, and special libraries; library organizations; and Federal agencies, such as the Office of Education.

Demonstration centers for talent development project

Two demonstration centers to exhibit teaching techniques, curriculum materials, and administrative practices that are effective in the identification and development of talent are being supported by the Office of Education's cooperative research program as part of the talent development project. The University of Illinois will direct one center; the California State Department of Education the other. The Illinois center will demonstrate secondary school programs for gifted students in English, social science, mathematics, and science.

Scientific inquiry training methods will also be demonstrated and materials disseminated to a group of elementary school teachers. The California center will demonstrate differential programing in enrichment, acceleration, counseling, and special classes for gifted pupils in grades 1 through 9.

The Office of Education's talent development project is an officewide effort in behalf of the talented. For additional information on the project, see the November–December 1962 and the March 1963 issues of *School Life*.

OE is advised on how to get statistical staff

In view of the Nation's shortage of statisticians acquainted with education and of educators trained in statistics, an advisory panel has recommended that the Office of Education undertake a program to train persons in educational statistics. The Office should work at the job from two angles, the panel said: First, it should administer—might even subsidize—short courses, institutes, conferences, and inservice programs; second, it should promote programs in colleges and universities by providing funds for such purposes as training centers and fellowships.

This recommendation is one of several made by a panel which during the past year, under the chairmanship of O. Meredith Wilson of the University of Minnesota, examined the statistical program of the Office of Education. The panel also recommended that the Office—

—Establish a research and development staff to continuously study all aspects of the techniques of collecting, analyzing, and reporting data;

—Have, under its own control, the automatic equipment it needs to serve the Nation as a center of educational statistics;

—Appoint a permanent advisory committee—perhaps one of six members, each serving 3 years on a rotating basis—to concern itself with the statistical problems of the Office of Education.

Digest of Educational Statistics—1963 edition

The 1963 edition of the *Digest of Educational Statistics*, a revision and expansion of the first edition published in 1962, is just off the press. The 1963 edition summarizes in 125 tables and 5 charts the most recently reported and estimated data on elementary, secondary, and higher education; Federal programs; and miscellaneous subjects related to education.

In addition to the usual statistics on enrollment, teachers, graduates, schoolhousing, and financing, the 1963 *Digest* includes data on such subjects as the employment status of high school graduates and dropouts, annual mean earnings of men by years of school completed, expenditures for education as a percent of national income (1929–30 to 1962–63), and expenditures for research and development.

The *Digest of Educational Statistics, 1963* (OE–10024–63), was prepared by the Division of Educational Statistics, U.S. Office of Education. Copies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, for 60 cents each.

Education Directory, 1962–63

The Office of Education has added a fifth volume to the *Education Directory, 1962–63*, and revised and expanded one volume.

The new volume, *Part 5, Federal Government*, lists the names and official titles of key persons working in education programs in all Federal Government departments and independent agencies, in one international organization (the Organization of American States), and in two quasi-official agencies (the American National Red Cross and the National Academy of Sciences).

For many years—through 1960–61—officials in the U.S. Office of Education were listed in part 1 of the *Directory*, then called Federal Government and the States. But as Federal educational programs have expanded there has been a demand for lists of officials in other agencies. Part 5 is published to meet that demand.

The revised edition of *Part 2—Public School Systems* lists all county-intermediate administrative units and supervisory unions, the names of superintendents, and their addresses; all local school districts with 300 or more pupils, the names of superintendents and their addresses, and enrollment to the nearest 100 pupils; and superintendents of church-related schools of the five church organizations that maintain school systems on a State, regional, or national basis.

All five parts of the *Educational Directory, 1962–63*, are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, at the prices indicated below:

Part 1—State Governments (OE–20004–63), 79 p., 30 cents.

Part 2—Public School Systems (OE–20005–63), 246 p., $1.

Part 3—Higher Education (OE–50000–63), 221 p., 75 cents.

Part 4 — Education Associations (OE–10001–63), 122 p., 50 cents.

Part 5—Federal Government (OE–10025–63), 61 p., 25 cents.

Project English

SINCE *School Life* last reported on research projects supported by Project English, the Office has negotiated contracts for 11 new projects. The new ones are listed below by institution, director, and subject:

The Ohio State University, Charles B. Huelsman, Jr. The influence of vision training on the subsequent reading achievement of fourth-grade pupils.

The Regents of the University of Michigan, Irving H. Anderson, Geraldine T. Scholl. Reading, writing, and spelling achievement of groups of English, Scottish, and American children.

Colorado State College, Leonard P. Landry. A high school course in grammar and composition, grades 9–12, based on a correlation of the traditional and structural methods of language analysis.

Ball State Teachers College, Anthony L. Tovatt. An oral-aural visual stimuli approach to teaching reading composition to ninth-grade students.

Florida State University, Kellogg W. Hunt. Differences in grammatical structures written at three grade levels, the structures to be analyzed by transformational methods.

University of Minnesota, Mildred C. Templin. Language skills of children with varying speech sound articulation in kindergarten: longitudinal study through grade five.

Stanford University, Paul R. Hanna, Lee L. Jacks. Analysis of phoneme-grapheme relationships in 10,000 or more English words for cues to improvement of instruction in spelling and for other purposes.

Stetson University, Joseph T. Sutton, Eliot D. Allen. The effect of practice and evaluation in improvement in written composition.

The Ohio State University, Neal F. Johnson. The sequential characteristics of language.

University of Illinois, James R. Squire. English programs in 50 high schools which consistently educate outstanding students in English.

The Regents of the University of California, Harry Singer. Substrata-factor changes accompanying development of general reading ability at the elementary school level.

In addition, Project English is supporting four new curriculum centers: University of Georgia, J. W. R. Lindemann. Developing children's competency in written composition—kindergarten through elementary school—by means of curricular materials based upon what is known about the relationship between understanding of concepts and proficiency in language.

Florida State University (Tallahassee). Dwight L. Burton. To develop and test approaches to sequential curriculums in junior high school English.

Columbia University, Gerald Dykstra. Teaching of English as a second language.

Wisconsin State Department of Public Instruction, Robert C. Pooley (University of Wisconsin). A sequential English language arts curriculum in linguistics, logic, semantics, rhetoric, composition, and literary analysis and criticism for kindergarten through grade 12.

The Project is also supporting two new demonstration centers:

Syracuse University, William D. Sheldon. A center for demonstrating the teaching of reading to students in grades 7–12.

Western Reserve University, George Hillocks, Jr. Literature, language, and composition for honors students and average students: a comprehensive program for grades 7–9.

Regulations for title III of NDEA are revised

Public elementary and secondary schools receiving Federal funds under title III of the National Defense Education Act, to improve instruction in science, mathematics, and modern foreign languages, will now be able to use these funds to purchase professional reference materials for teachers in these fields. They may also purchase transparencies, and equipment and materials for teachers to use in preparing audiovisual aids.

Schools now may also submit separate proposals for minor remodeling of laboratories or classrooms. Among the other major revisions is one that permits approval of projects originated by public elementary or secondary schools operated by State educational agencies—for example, schools for the deaf and the blind.

Authorization for these changes is to be found in the newly revised regulations applying to sections 301–304 of title III; they became effective August 1. The Office of Education has written guidelines to accompany these regulations and has sent copies to the chief State school officers.

FFA membership increases

THE FUTURE FARMERS of America reached a record membership of 395,812 in the 1962–63 school year, an increase of 7,820 over the previous year. The organization has about 8,500 local high school chapters in the 50 States, Puerto Rico, the Virgin Islands, and Guam. Increase in membership was reported by 35 State associations. Texas is the State with the largest membership.

Membership in the national organization parallels the number of students taking vocational agriculture courses in high school. The increased membership probably reflects an awareness on the part of farm boys of the need for education.

Surveys made by State supervisors and graduate students in agriculture show that about 35 percent of the boys who take 3 or more years of vocational agriculture courses enter farming full time. About 25 percent go on to college, usually to major in agriculture. Others use their education, experience, and FFA training in off-farm agricultural occupations.

Geneva recommendations to be published

The recommendations made to national ministries of education by the 26th International Conference on Public Education at Geneva, July 1–12, will soon be published by the Office of Education. The recommendations are aimed at two goals: The first, at improving the organization of educational and vocational guidance; the second, at relieving the shortage of teachers in elementary schools. These topics, in addition to reports from participating countries on the progress they had made in education during the year just past, were the principal matters on the conference agenda.

The United States sent four delegates to the conference, which is cosponsored by the International Bureau of Education and UNESCO. John H. Fischer, president of Teachers College, Columbia University, headed the delegation; Catherine B. Coleman, director, Bureau of Teacher Education, State of Pennsylvania, was adviser on the shortage of teachers; Willis E. Dugan, professor of educational psychology, University of Minnesota, was adviser on educational guidance; and Hazel F. Gabbard, chief, International Organizations Staff of the Office of Education, who has previously attended the Geneva conferences as adviser, gave continuity to the delegation.

This year the United States had redesigned its display room at the conference headquarters in Geneva, and had installed a new exhibit. The exhibit includes six 3-minute color films captioned in English and French, which are triggered to show at the touch of a button; they give glimpses into the schools and colleges of the United States and both express and imply information about some of the distinguishing features of our educational system.

The conferees this year were provided with three volumes of documentation: *The 1962 Yearbook of International Education* (reports on progress in 84 countries, 498 pp., $6.50); *The Organization of Educational and Vocational Guidance* (reports from 75 countries, 188 pp., $3); and *The Shortage of Primary Teachers* (reports from 83 countries, 191 pp., $3.25). All three may be obtained from the UNESCO Publications Center, 801 Third Avenue, New York, N.Y.

Peace Corps wants teachers

The Peace Corps estimates that it will need at least 5,000 teachers during the next 12 months to meet requests from the 47 countries where the corps now has educational projects in Latin America, Africa, and Asia. Teachers are wanted in all the subjects usually taught in U.S. schools, but the greatest demand is for teachers of mathematics, science, English as a second language, vocational subjects, and physical education. College teachers are being requested as well as teachers for elementary and secondary schools.

Teachers planning to retire during the current school year and teachers eligible for a leave of absence are invited, if they are physically fit, to apply for these oversea posts. Information, descriptive literature, and a questionnaire are available from the Peace Corps, Division of Recruiting, Washington, D.C. Applicants should specify their field and tell whether they are prospective retirees or are planning a leave of absence. No time limit has been set for the filing of applications, but applications are usually considered in the order in which they are received.

The Status of Women—The President's Commission Reports

The President's Commission on the Status of Women presented its report, *American Women*, to President Kennedy in a White House ceremony on October 11, 1963, the birthday of the Commission's chairman, the late Mrs. Eleanor Roosevelt.

The Commission was established on December 14, 1961, to make recommendations for ending discrimination against women in government and private employment and recommendations for services which would enable women to continue their work as wives and mothers and at the same time make a contribution to the world around them.

After Mrs. Roosevelt's death last November the Vice Chairman of the Commission, Dr. Richard A. Lester of Princeton University, and the Executive Vice Chairman, Mrs. Esther Peterson, Assistant Secretary of Labor, directed the Commission's work.

Hundreds of distinguished men and women—representatives of leading groups and organizations throughout the country—worked with the 26 members of the Commission and its committees on education, home and community, employment, protective labor legislation, social insurance and taxes as they affect women and civil and political rights. Some submitted opinions and information, others participated in conferences the Commission held to consider women in employment, women as portrayed by the mass media, contemporary functions of voluntary agencies, and special problems of Negro women.

The Commission considered the findings of its committees and the ideas and the knowledge of all contributing groups and individuals in making the recommendations included in *American Women*.

Copies of *American Women* are available from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, at $1.25 each.

SCHOOLHOUSING IN 1963
USOE survey begins next month

GEORGE J. COLLINS

SCHOOL facilities must, above all, serve the main objective of the educational program—*learning*. If they are inadequate for that purpose or are overcrowded, they hamper the program; what is more, if the facilities are inadequate, they eventually assume in the public mind greater importance than the program they house.

To keep the importance of school facilities in their proper perspective, the public must have the facts; and for that reason an inquiry into the status of schoolhousing—into the number and condition of buildings and the suitability of classrooms as places of instruction—is one of the most important educational inquiries the Office of Education can make.

Next month we will begin a survey of school plants to determine the extent to which they provide a healthful, sanitary, and fire-safe environment for the pupils in the educational program. The survey will emphasize facts about the condition of the buildings in each plant in the sample and will count the number of pupil stations that have specific inadequacies from the standpoint of instruction.

Dr. Collins is chief, Elementary and Secondary Education Surveys Section, Office of Education. He came to the Office of Education early in 1962, from New Mexico, where he was professor of education at the University of New Mexico and director of the school planning program in the State department of education.

The sample for the survey is being drawn from a universe established in the spring of 1962, when State educational agencies, the Bureau of the Census, and the Office of Education conducted the most extensive survey of public and nonpublic schoolhousing in the history of the Nation. That survey, a national inventory of school facilities which would be available to the public in the event of nuclear attack or other emergency, covered the schools, building by building; and it obtained nearly 107,000 reports representing 97 percent of the public schools and 93 percent of the nonpublic. Together these schools have 97 percent of the total enrollment in the United States. (The inventory was requested by Executive Order 11001 and supported by the Office of Civil Defense as part of a national assessment by the Department of Defense.)

Although the inventory was not intended to determine the number of "unsatisfactory" or "overcrowded" classrooms, it did bring in some indisputable facts about the condition of school buildings, such as those shown in table 1. It found, for example, that among the public schools now in operation, nearly 30,000 buildings—235,000 rooms—had been built before 1920; that 40,000 buildings—155,000 rooms—were rated as combustible; and that more than 10 million pupils were in rooms with 30 or more pupils.

In fact the data proved so informative that Commissioner Keppel presented some of them this past spring to the committees on education in the Senate and the House of Representatives. He used, for instance, the median number of pupils per room to demonstrate how small variations in the ratio of pupils per room can result in wide variations in estimates of the classrooms needed (table 2): on the basis of the 1962 median—27.6 elementary and 26.3 secondary school pupils—the schools needed 117,409 additional classrooms; on the basis of the more desirable ratio of 25 elementary and 20 secondary pupils, they needed 272,000; and on the basis of

Example of the kind of data that will already be on this year's questionnaire when it goes out to a particular school plant [1]

Building	When completed	Fire-resistive rating	Number of instruction rooms		General-use facilities	Non-permanent rooms	Offsite rooms	Acreage
			Designed as such	Improvised				
No. 1	Before 1920	Semi-fire-resistive	9		Library			6
No. 2	...do	Combustible		2				
No. 3	1950–59	Fire-resistive	8					
No. 4	...do	...do	1		Cafe-auditorium			
No. 5								

[1] For each plant the data will be those already reported for the plant at the time of the 1962 inventory of school facilities.

Table 1.—Instructional rooms in public school plants, by selected characteristics, by State, spring 1962

(Percentages are of total instructional rooms)

State	Total number of instructional rooms [1]	Instructional rooms [2] in permanent onsite buildings, either old or combustible or both						Instructional rooms in nonpermanent onsite buildings		Instructional rooms in offsite buildings	
		Built before 1920				Built after 1920 and combustible					
		Combustible		Noncombustible							
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States	1,478,649	51,477	3.5	183,756	12.4	103,080	7.0	31,230	2.1	5,934	0.4
Alabama	29,431	1,050	3.6	1,103	3.7	6,741	22.9	501	1.7	169	.6
Alaska	1,813	15	.8	.....	.....	518	28.6	38	2.0	20	1.1
Arizona	12,787	151	1.2	1,182	9.2	471	3.7	616	4.8	45	.4
Arkansas	15,450	371	2.4	1,179	7.6	2,247	14.5	475	3.0	122	.8
California	119,619	1,563	1.3	3,135	2.6	32,036	26.8	10,195	8.5	256	.2
Colorado	17,057	1,086	6.4	2,060	12.1	1,660	9.7	393	2.3	81	.5
Connecticut	20,622	877	4.3	3,434	16.7	1,128	5.5	150	.7	50	.2
Delaware	3,847	39	1.0	25	.6	65	1.7	36	.9	9	.2
District of Columbia	4,521	.....	.....	967	21.4	5	.1	48	1.1	2	[3]
Florida	37,018	406	1.1	2,069	5.6	2,054	5.5	2,109	5.7	214	.6
Georgia	36,175	639	1.8	1,615	4.5	4,110	11.4	321	.9	105	.3
Hawaii	5,766	346	6.0	114	2.0	2,097	36.4	346	6.0	16	.3
Idaho	6,972	320	4.6	1,276	18.3	714	10.2	141	2.0	69	1.0
Illinois	73,136	3,926	5.4	13,358	18.3	4,631	6.3	415	.6	123	.2
Indiana	39,250	924	2.4	8,997	22.9	1,470	3.7	326	.8	133	.3
Iowa	27,552	1,692	6.1	7,930	28.9	2,250	8.2	213	.8	215	.8
Kansas	24,554	737	3.0	3,665	14.9	1,271	5.2	619	2.5	91	.4
Kentucky	24,373	872	3.6	2,228	9.1	2,620	10.7	1,004	4.1	226	.9
Louisiana	29,409	446	1.5	1,460	5.0	4,128	14.0	549	1.9	33	.1
Maine	8,744	1,113	12.7	1,387	15.9	2,980	34.1	54	.6	41	.5
Maryland	23,769	863	3.6	1,765	7.4	1,593	6.7	298	1.3	86	.4
Massachusetts	33,787	2,473	7.3	8,174	24.2	3,424	10.1	107	.3	109	.3
Michigan	63,636	2,894	4.5	6,750	10.6	3,649	5.7	411	.6	186	.3
Minnesota	30,678	2,128	6.9	5,520	18.0	3,015	9.8	269	.9	168	.5
Mississippi	19,615	127	.6	534	2.7	1,888	9.6	246	1.3	79	.4
Missouri	33,213	1,045	3.1	5,512	16.6	2,303	6.9	323	1.0	104	.3
Montana	7,691	665	8.6	1,251	16.3	1,479	19.2	85	1.1	64	.8
Nebraska	15,572	1,852	11.9	3,679	23.6	2,904	18.6	168	1.1	41	.3
Nevada	2,952	88	3.0	208	7.0	238	8.1	22	.7	.....	.....
New Hampshire	4,784	520	10.9	780	16.3	703	14.7	8	.2	21	.4
New Jersey	44,921	1,173	2.6	9,812	21.8	1,598	3.6	102	.2	237	.5
New Mexico	9,915	64	.6	394	4.0	502	5.1	579	5.8	33	.3
New York	116,481	1,765	1.5	19,331	16.6	2,375	2.0	350	.3	767	.7
North Carolina	44,214	722	1.6	1,935	4.4	4,874	11.0	275	.6	59	.1
North Dakota	7,206	844	11.7	1,366	19.0	1,313	18.2	150	2.1	93	1.3
Ohio	78,078	1,183	1.5	15,437	19.8	1,407	1.8	708	.9	419	.5
Oklahoma	25,314	327	1.3	2,413	9.5	1,964	7.8	873	3.4	55	.2
Oregon	18,214	781	4.3	1,025	5.6	7,403	40.6	168	.9	41	.2
Pennsylvania	78,298	2,969	3.8	16,232	20.7	4,343	5.5	437	.6	328	.4
Rhode Island	5,629	553	9.8	937	16.6	734	13.0	26	.5	5	..
South Carolina	22,192	377	1.7	1,068	4.8	1,932	8.7	286	1.3	51	.2
South Dakota	8,893	1,430	16.0	1,287	14.5	2,258	25.4	221	2.5	100	.1
Tennessee	31,148	1,047	3.4	1,676	5.4	5,640	18.1	260	.8	48	.2
Texas	88,427	615	.7	5,949	6.7	5,387	6.1	4,004	4.5	285	.3
Utah	9,961	876	8.8	1,615	16.2	1,194	12.0	94	.9	48	.5
Vermont	3,533	649	18.4	629	17.8	963	27.3	66	1.9	35	1.0
Virginia	33,754	1,384	4.1	2,551	7.6	3,779	11.2	463	1.4	177	.5
Washington	27,836	887	3.2	2,378	8.5	4,713	16.9	1,201	4.3	134	.5
West Virginia	17,003	1,627	9.6	2,149	12.6	3,809	22.4	294	1.7	46	.3
Wisconsin	29,356	2,865	9.8	3,868	13.2	3,571	12.2	133	.5	80	.3
Wyoming	4,483	111	2.5	347	7.7	406	9.1	54	1.2	15	.3

Source: National Inventory of School Facilities for Resource Evaluation and Damage Assessment, 1962, made by the Office of Education, the Census Bureau, and the State departments of education.

[1] Includes 25,872 (1.8 percent) improvised or makeshift instructional rooms.

[2] Includes improvised or makeshift instructional rooms.

[3] Less than one-tenth of 1 percent.

the less desirable ratio of 30 pupils per room at both levels, they needed fewer than 66,000.

Not only have the data from the inventory proved useful in a number of ways but they have stimulated demand for more detailed information about schoolhousing. Moreover the inventory itself has demonstrated that a schoolhousing survey of considerable scope and detail can be made, and the data compiled and reported, in less than a year; the inventory took less than 9 months.

The new survey, the one about to begin, has been planned both to augment and to keep up to date the information gathered in the 1962 inventory. It will ask for more detailed information than the Office seeks in the regular fall survey of public schools (the regular fall survey collects, in addition to data on enrollments and teachers, such data on schoolhousing as the number of new classrooms completed and the number abandoned in the year preceding, the number scheduled for completion in the current year, and the number of pupils currently in excess of normal classroom capacity). It will, however, incorporate one of the features of the fall survey—the reliance on local determination of what is satisfactory and adequate, to allow for differences in State and local standards.

We will survey a stratified sample of local schools in three different categories—by type (elementary, secondary, or combined elementary and secondary); by age (completed before 1920, between 1920 and 1940, or after 1940); and by size (small, medium, or large).

The questionnaire

The questions asked will be about certain characteristics of the school plant and of each building or addition. (School plant is defined as "the sites, buildings, and equipment constituting the physical facilities used by a single school or by two or more schools sharing the use of common facilities," in *Property Accounting for Local and State School Systems*, by Paul Reason and George G. Tankard, Jr., Accounting Handbook III, U.S. Office of Education, 1955.)

Table 2.—Number of additional rooms needed for instructional use under 3 different ratios of pupils per room, by State, spring 1962

State	25 pupils, elementary—20 pupils, secondary	27.6 pupils, elementary—26.3 pupils, secondary (1962 median)	30 pupils, elementary—30 pupils, secondary
United States	271,871	117,409	65,970
Alabama	7,267	3,388	1,953
Alaska	172	45	24
Arizona	2,530	1,207	750
Arkansas	3,497	1,686	1,063
California	35,506	18,518	11,748
Colorado	3,014	1,250	673
Connecticut	2,103	764	404
Delaware	422	142	85
Florida	11,634	5,646	3,336
Georgia	8,440	4,108	2,333
Hawaii	1,233	471	239
Idaho	1,182	457	246
Illinois	11,295	5,363	3,270
Indiana	7,020	2,862	1,512
Iowa	2,310	807	452
Kansas	1,842	691	379
Kentucky	5,128	2,367	1,415
Louisiana	4,800	2,267	1,326
Maine	979	383	174
Maryland	6,391	2,800	1,520
Massachusetts	5,315	2,200	1,329
Michigan	13,495	5,593	3,025
Minnesota	3,507	1,206	607
Mississippi	5,410	2,834	1,810
Missouri	5,105	2,167	1,171
Montana	764	291	161
Nebraska	1,277	546	310
Nevada	457	175	82
New Hampshire	479	158	65
New Jersey	6,945	2,550	1,319
New Mexico	1,932	887	548
New York	17,776	6,523	3,465
North Carolina	7,800	3,119	1,460
North Dakota	596	298	222
Ohio	12,752	4,812	2,346
Oklahoma	3,482	1,544	929
Oregon	1,622	327	94
Pennsylvania	15,370	5,651	2,862
Rhode Island	935	364	194
South Carolina	6,553	3,190	1,829
South Dakota	483	186	110
Tennessee	6,387	2,483	1,103
Texas	14,173	6,029	3,370
Utah	2,256	993	499
Vermont	229	80	45
Virginia	6,766	2,874	1,457
Washington	4,910	2,006	1,113
West Virginia	3,684	1,421	688
Wisconsin	3,232	1,023	463
Wyoming	252	73	41
District of Columbia	1,162	584	351

Source: National Inventory of School Facilities for Resource Evaluation and Damage Assessment, 1962, made by the Office of Education, the Census Bureau, and the State departments of education.

Every effort will be made to relieve respondents of the work of repeating information they gave last year for the inventory. The questionnaire

sent to each school will have already printed on it the information supplied by that school last year, and local school officials will be asked to provide only certain facts about changes that have subsequently been made. Page 8 gives an example of the kind of information that will appear on the questionnaire sent to a school which last year reported four buildings, one of which had a library and one a cafeteria-auditorium; the fifth line is for reporting a fifth building or addition that may have been constructed since 1962.

In addition to asking for the current figure on the number of pupils enrolled in each school, the survey will ask specific questions about traffic and physical hazards on the school site. Here are two specific questions concerned with public health:

At this site, do water source, water supply, and plumbing system meet the requirements of the local and State health departments?

At this site, do the number and distribution of sanitary facilities (e.g., toilets, lavatories, and drinking fountains) meet the requirements of the local and State health departments?

The questions about fire safety include the following:

Is a fire alarm system provided?

Is the fire alarm audible throughout the building?

Is a sprinkler system provided in areas where fire hazards are high (e.g., in basements and storage rooms)?

Are stairwells and stairways constructed of fire-resistive materials?

Do stairwells and stairways open directly to the out of doors?

Are at least two remote means of exit available from the building?

Are exits sufficient in number and width according to fire protection standards accepted in the State?

Officials will be asked to indicate any changes in the total number of instructional rooms in their schools since the 1962 inventory, including classrooms, laboratories, and shops.

In the final section of the questionnaire, local school officials will be asked to give their appraisal of each building under their control. If they plan to discontinue any building, they will be asked to give their reasons (six are listed) and to indicate plans for replacement.

School officials will complete the survey by indicating the additional rooms needed to accommodate pupils they consider "in excess of normal capacity" and to replace rooms they consider "inadequate."

Plans call for repeating the survey in the fall of 1964 and perhaps at fairly regular intervals thereafter. Our thinking at present is that once a questionnaire has been completed for a particular school plant, subsequent questionnaires will require the respondent only to verify the original data and to make the necessary additions and revisions to bring them up to date. That is, a respondent will not be called on to report over and over again the stable and permanent information about his school plant.

The overall plan

Preliminary field trials of the questions were made late this summer in 4 States, and an extensive pretest of 450 school plants throughout the Nation was begun in October. We are now studying the returns, and plan to launch the main survey in November.

The data will be processed by a high-speed optical scanner which reads the replies on the questionnaires, checks them for consistency, and transfers them to magnetic tapes for use in computers.

Because the reports will bring in objective data in considerable detail, and because the computer makes speedy and complex analyses possible, we will be able to use refined statistical measures in determining the condition and adequacy of the Nation's school facilities. Simplified representations, or models (for the purposes of this survey the models will be, for example, the 1963 median number of pupils per room and other hypothetical ratios, such as those shown in table 2), can be quickly arrived at and just as quickly applied in determining the probable effects of different decisions about how pupils will be accommodated.

The computer will count not only rooms with single hazards—for example, rooms located in buildings without fire alarm systems—but also rooms that combine two or more hazards; it will also permit analysis of various conditions and combinations of conditions to find multiple and interlocking effects of various hazards and other circumstances such as the age of the building.

The various combinations of data will be presented in various kinds of tables—not only tables showing the number of plants, buildings and rooms with certain characteristics related to their adequacy for instructional purposes but tables showing the numbers and percentages of pupils accommodated in school under various conditions affecting health and safety.

The survey, however, will be much more than a series of survey routines. In its entirety it will be, for one thing, a test of a method for getting information of optimal usefulness, not only to the States and the local communities but at the national level, for determining the need for school facilities. The method has been worked out not only with an eye to an efficient pattern of operations that can be followed with dispatch by both the respondent and the Office, but with attention to the *quality* of the data that will be collected. The questionnaire has been designed (1) to elicit accurate, precise, and objective data that are combinable into national totals and reliable as a basis for projections—and that are detailed enough to be revealing; (2) to allow for differences in State and local standards; and (3) to facilitate the flow of data, from the source to the Office, and from the Office to the public.

We must admit, however, that no matter how well-designed the questionnaire proves to be, the success of the survey will depend on the cooperation of State and local school officials. Fortunately, with the ever increasing use being made of Accounting Handbook III, *Property Accounting for Local and State School Systems*, comparability of the data comes each day closer to being assured.

5 Years of NDEA

To mark the fifth birthday of the National Defense Education Act of 1958 on September 2, the Office of Education has reviewed the accomplishments of programs the act provides for. The review is in fact an accounting for dollars invested—$800 million—and a counting of persons invested in—nearly 750,000. These are only the visible accomplishments, but give an idea of the dividends that the investment will be paying for many years as the people aided work to strengthen education and to supply the trained manpower the Nation needs.

Student loans

About 490,00 students in 1,534 colleges and universities borrowed approximately $330 million from the student loan fund. Seventy percent of the loans went to students who have superior academic background and who intend to teach in elementary and secondary schools and to students with superior ability or preparation in science, mathematics, or a modern foreign language. Ninety percent of the students said they could not have begun or stayed in college without the loans. The average loan was about $478.

Graduate fellowships

About $80 million (spent or obligated) has gone into the graduate fellowship program; one-half of it to cover stipends and fees for 7,000 fellows and the other half to 170 colleges and universities to help pay for the costs of programs in which fellows are enrolled. During the 1963 fiscal year, 1,500 students received awards to study in the 1963–64 academic year; they are enrolled in 621 new or expanded programs at 155 institutions. All States and the District of Columbia are participating.

Technical education

Approximately 30,500 technicians have completed training under the NDEA area vocational program, which is designed to help meet the need for skilled manpower in electronics, drafting and design, instrumentation, industrial chemistry, and other technical fields. Others are being trained: during the 1962–63 school year 65,000 students were in 2- or 3-year preparatory programs, and 103,000 working adults were in upgrading and refresher courses—an estimated 20,000 more than the 148,000 enrolled in 1961–62. In 1959, 262 schools were participating; in 1963, 630 are. States and communities have overmatched the $42.7 million in Federal funds by about 2 to 1.

Guidance, counseling, and testing

Altogether approximately $102 million in NDEA funds has been spent on guidance, counseling, and testing programs. With the help of these funds the number of full-time counselors in local schools guidance programs has been increased from 12,000 (a ratio of 1 counselor to 900 students) to 27,000 (a ratio of 1 to 540); 67.2 million scholastic aptitude and achievement tests have been given to students in public elementary schools and 1.9 million students in nonpublic secondary schools; and 13,800 secondary school counselors or teachers preparing to be counselors have been trained in 416 special institutes 2,280 counselors have been or are being trained in 76 summer and 1963–64 academic year institutes.

Improved instruction

States and Territories have matched, dollar for dollar, the $181 million in Federal funds spent to strengthen instruction in science, mathematics, and foreign languages in public elementary and secondary schools. State education agencies have approved more than 180,000 projects for local public schools for purchasing materials and equipment and for minor remodeling of facilities. The number of language laboratories has increased from 46 in 1958 to nearly 6,000. The number of State supervisors of instruction in these three subjects has increased from 33 in 1958 to 222.

Private schools have borrowed $3 million to improve their programs.

Language development

More than $58 million has been obligated to stimulate the development and improve the teaching of modern foreign language.

Nearly 14,000 language teachers in elementary and secondary schools—approximately one-fourth of the total number—have attended language institutes; 301 institutes have been held.

Fifty-five language and area centers have been established at 34 colleges and are offering instruction in some 70 languages which had rarely been taught in the United States before 1958.

More than 2,000 students have been awarded fellowships to study one or more of the 60-odd languages identified as critically important.

Two hundred and twenty-four research grants have been made to language experts to study the greatest needs in language instruction and the best methods of teaching and to develop instructional materials.

Communications media

Awards have been made to 114 institutions and agencies for research into the most effective way of using television, radio, motion pictures, and similar communications media for educational purposes. Of the 227 projects approved, 98 have been completed.

Contracts have been made—159 in all—with 77 institutions, agencies, and individuals for dissemination of information on the use of communication media.

More than $19 million has been obligated to the media program.

Improvement of statistical services

Forty-eight State education agencies have received a total of $5.3 million for use in improving and expanding their statistical services.

Bible Reading in The Public Schools

AUGUST W. STEINHILBER

THE SUPREME COURT of the United States on June 17, 1963, in an 8 to 1 decision ruled that a State cannot constitutionally require the holding of religious exercises even if the majority of persons affected consent to the exercises.[1] The ruling covered two cases; in both the basic element at issue was validity of State action requiring that public schools begin each day with readings from the Bible. The recitation of the Lord's Prayer in the public school was also an element.

One case originated in Maryland and the other in Pennsylvania. The Maryland case grew out of a ruling by the Board of School Commissioners of Baltimore City requiring public schools to hold morning exercises consisting of "reading without comment in the Holy Bible and/or the use of the Lord's Prayer." The rule was amended to permit children to be excused from these services on request of the parent. The parent of a student in a Baltimore public school brought action, saying that this rule—

. . . threatens their [the petitioners'] religious liberty by placing a premium on belief as against nonbelief and subjects their freedom of conscience to the rule of the majority; it pronounces belief in God as the source of all moral and spiritual values, and thereby renders sinister, alien and suspect the beliefs and ideals of . . . Petitioners, promoting doubt and question of their morality, good citizenship and good faith.

At issue in the other case was a statute of the Commonwealth of Pennsylvania, which required that—

At least 10 verses from the Holy Bible shall be read, without comment, at the opening of each public school on each school day. Any child shall be excused from such Bible reading, or attending such Bible reading, upon the written request of his parent or guardian.[2]

The parents of certain children attending public school in Abington, Pennsylvania, regular church-going members of a religious body, filed suit because, they said, the specified religious doctrines purveyed by a literal meaning of the Bible "were contrary to the religious beliefs which they held and to their familial teachings."

The majority opinion of the U.S. Supreme Court, written by Mr. Justice Clark, traced the history of the First Amendment of the Constitution and the judicial rulings interpreting and applying it. In reviewing its judicial rulings the Court first reaffirmed, as decisively settled, the legal doctrine that the 1st Amendment ("The Congress shall make no law respecting an establishment of religion,[3] or prohibiting the free exercise thereof . . .[4]") is made wholly applicable to the State through the 14th Amendment. Second, the Court asserted that the Establishment Clause does more than merely forbid Government preference of one religion over another, for as the Court said in Everson—

. . . neither a state nor the Federal Government can set up a church. Neither can pass laws which aid one religion, aid all religions, or prefer one religion over another.[5]

On this point, the Court used a part of Mr. Justice Rutledge's dissent in Everson:

The [First] Amendment's purpose was not to strike merely at the official establishment of a single sect, creed or religion, outlawing only a formal relation such as had prevailed in England and some of the Colonies. Necessarily it was to uproot all such relationships. But the object was broader than separating church and state in this narrow sense. It was to create a complete and permanent separation of the spheres of religious activity and civil authority by comprehensively forbidding every form of public aid or support for religion.[6]

In developing the scope of and the relationship between the two clauses of the First Amendment dealing with religious freedom, that is, the Establishment Clause and the Free Exercise Clause, the Court referred to a number of its earlier decisions:

. . . On the one hand, it forestalls compulsion by law of the acceptance of any creed or the practice of any form of worship. Freedom of conscience and freedom to adhere to such religious organization or form of worship as the individual may choose cannot be restricted by law. On the other hand, it safeguards the free exercise of the chosen form of religion. Thus, the Amendment embraces two concepts—freedom to believe and freedom to act . . .[7]

* * * * *

Although these two clauses may in certain instances overlap, they forbid two quite different kinds of governmental encroachment upon religious freedom. The Establishment Clause, unlike the Free Exercise Clause, does not depend upon any showing of direct governmental compulsion and is violated by the enactment of laws which establish an official religion whether those laws operate directly to coerce non-observing individuals or

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[1] *School District of Abington Township, Pennsylvania* v. *Schempp, Murray* v. *Curlett*, 83 S. Ct. 1560 (1963).

[2] 24 Pennsylvania Statutes, § 15–1516 as amended.

[3] Usually referred to as the "Establishment Clause."

[4] Usually referred to as the "Free Exercise Clause."

[5] *Everson* v. *Board of Education*, 330 U.S. 1, 15 (1947).

[6] Id., at 31–32.

[7] *Cantwell* v. *Connecticut*, 310 U.S. 296, 303 (1940).

not. This is not to say, of course, that laws officially prescribing a particular form of religious worship do not involve coercion of such individuals. When the power, prestige and financial support of government is placed behind a particular religious belief, the indirect coercive pressure upon religious minorities to conform to the prevailing officially approved religion is plain.[8]

MR. JUSTICE CLARK, speaking for the majority, pointed out that religion has been closely identified with our history and government. Here he quoted from several statements from earlier opinions, among them these two: "We are a religious people whose institutions presuppose a Supreme Being" and "The history of man is inseparable from the history of religion." He went on to say that religious freedom was planted deep in our heritage and that "this freedom of worship was indispensable in a country whose people came from the four quarters of the earth and brought with them a diversity of religious opinion."

The Court ruled that in the relationship between man and religion, the State is firmly committed to a position of neutrality. Mr. Justice Clark in describing the neutral position said:

The wholesome "neutrality" of which this Court's cases speak thus stems from a recognition of the teachings of history that powerful sects or groups might bring about a fusion of governmental and religious functions or a concert or dependency of one upon the other to the end that official support of the State or Federal Government would be placed behind the tenets of one or of all orthodoxies. This the Establishment Clause prohibits. And a further reason for neutrality is found in the Free Exercise Clause, which recognizes the value of religious training, teaching and observance and, more particularly, the right of every person to freely choose his own course with reference thereto, free of any compulsion from the state. This the Free Exercise Clause guarantees. Thus, as we have seen, the two clauses may overlap. . . . (At 1571.)

The Court's test of neutrality is to determine whether the purpose or the primary effect of an enactment is to advance or inhibit religion; if either is true, the enactment is unconstitutional. On the basis of the evidence and pleadings, the Court concluded that in both cases the laws and determinations, legislative or administrative, required religious exercises and that the exercises were unconstitutional interferences under the Establishment Clause. To those who maintained that the religious practices in question constituted only a minor encroachment, the Court said, "The breach of neutrality that is today a trickling stream may all too soon become a raging torrent. . . ."

To the argument that States will become antireligious and that all references to religion are unconstitutional, the Court held:

We agree of course that the State may not establish a "religion of secularism" in the sense of affirmatively opposing or showing hostility to religion, thus "preferring those who believe in no religion over those who do believe." *Zarachi* v. *Clauson*, at 314. We do not agree, however, that this decision in any sense has that effect. In addition, it might well be said that one's education is not complete without a study of comparative religion or the history of religion and its relationship to the advancement of civilization. It certainly may be said that the Bible is worthy of study for its literary and historic qualities. Nothing we have said here indicates that such study of the Bible or of religion, when presented objectively as part of a secular program of education, may not be effected consistent with the First Amendment. But the exercises here do not fall into those categories. They are religious exercises, required by the State in violation of the command of the First Amendment that the Government maintain strict neutrality, neither aiding nor opposing religion. (At 1573.)

THE CONCURRING OPINION of Mr. Justice Douglas said in substance: The practices, the validity of which is the basis of this litigation, do more than violate the neutrality requirement. The Establishment Clause also forbids the employment of State facilities to aid any church; thus the practices are unconstitutional for the added reason that public funds are used to promote a religious exercise. Mr. Justice Douglas said:

The most effective way to establish any institution is to finance it; and this truth is reflected in the appeals by church groups for public funds to finance their religious schools. [Italics are those of Mr. Justice Douglas.] Financing a church either in its strictly religious activities or in its other activities is equally unconstitutional, as I understand the Establishment clause. (At 1575.)

MR. JUSTICE BRENNAN, in a 77-page concurrence, stressed both the need and the duty to separate the boundaries between civic and church life, even though the task is difficult. He said that not every involvement between church and State is unconstitutional, but that the Constitution does prohibit involvement between religious and secular institutions if the involvement serves essentially religious activities of religious institutions, employs the organization of Government for essentially religious purposes, or uses essentially religious means to serve governmental ends where secular means would suffice. He considered the involvements in the case before the Court as unconstitutional and gave a four-part explanation of his reasoning.

In the first part he discussed the meaning of the Establishment Clause at the time it was enacted, the problem of interpreting it, and the ways in which the Founding Fathers might have handled the cases at bar. He said that the Founding Fathers were aware of the history of religious persecution and that their primary fear was the establishment of an official national church, but, he said, nothing in

[8] *Engel* v. *Vitale*, 370 U.S. 421, 430–431 (1962).

the working of the Establishment Clause shows that its scope was limited to establishment of an official church. Since the framers of the Constitution could have used the word "church" instead of the broader term "religion," the Establishment Clause has broad comprehensive meanings "to prevent those official involvements of religion which tend to foster or discourage religious worship or belief."

The realization that this is the scope of the First Amendment does not, Justice Brennan says, solve the concrete problem here, that is, "Whether the practices here challenged, threatened those consequences the framers deeply feared;" or stated differently, whether "they tend to promote that type of interdependence between religion and the State which the First Amendment was designed to prevent."

At this point Justice Brennan mentioned some of the reasons why literal interpretation is difficult: First, history is ambiguous and many statements can be found to support either side of this argument; second, the entire structure of American education has changed from private to public since the First Amendment was ratified, for then public education was virtually unknown; third, the religious composition of the United States is more diverse than then; and fourth, the provision of free public education for all children is a result of religious diversification. Justice Brennan emphasized this last point by adding, "It is implicit in the history and character of American public education that the public schools serve an uniquely public function: The training of American citizens in an atmosphere free of parochial diversion or separatist influence of any sort—an atmosphere in which children may assimilate a heritage common to all American groups and religions."

The Establishment Clause reserves to parents the choice of school they desire for their children, public or private. The First Amendment prohibits the impairment of that freedom to both: The freedom of private schools "to inculcate whatever values they wish and the freedom of public schools from private or sectarian pressures."

Next Mr. Justice Brennan reviewed the Court's decision and came to these conclusions:

1. The Court, in order to remain neutral on religious doctrines, will not decide questions of control of church property or internal ecclesiastical disputes.

2. Neither Bradfield,[9] Quick Bear,[10] Cochran,[11] nor Pierce [12] was decided on the basis of the First Amendment. Everson [13] was the first case decided upon the Establishment Clause.

3. Minorities cannot exempt their conduct from secular control, for "to permit this would make the professional doctrines of religious belief superior to the law of the land and in effect permit every citizen to become a law unto himself. Government could exist only in name under such circumstances." At the same time the Government cannot, under most circumstances, compel students subject to a compulsory attendance statute to act in a manner offensive to their religious beliefs.

In the third part of his explanation Justice Brennan noted that both the Free Exercise Clause and the Establishment Clause are binding on the States and that the Establishment Clause seeks to protect not only the nonbeliever but also the devout believer "who fears the secularization of a creed which becomes too deeply involved with and dependent upon government"—a dual protection consistently honored in the decisions handed down by the Supreme Court. These decisions also show "that government may not employ religious means to serve secular purposes, however legitimate they may be, at least without the clearest demonstration that nonreligious means will not suffice."

In the light of the preceding information Justice Brennan considered the cases before the Court. He noted that in both cases, the recitation of the Lord's Prayer and Bible reading in the public schools were more sectarian than in Engel, the nonsectarian prayer case; and that even when State courts have upheld similar practices they have agreed to their religious nature. After outlining the history of criticism, debate, and conflict over religious exercises in public schools and State judicial and administrative decisions banning such exercises, Justice Brennan said: "The panorama of history permits no other conclusion than that daily prayers and Bible reading in the public schools have always been designed to be, and have been regarded as, essentially religious exercises." This fact alone, in his opinion, was sufficient to decide the cases; nevertheless, he made rebuttal to four other arguments stressed by the proponents of these practices:

1. *The argument.*—Although the origins of these practices may be religious, today they serve clearly secular purposes, that is, they have a salutory effect on the children's moral values.

The rebuttal.—Although this may be true, the Court must determine whether the means used infringe upon constitutional freedom, as in these cases, and whether these means are forbidden under the rule previously mentioned, that Government may not

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[9] *Bradfield* v. *Roberts*, 175 U.S. 291. Involved a Federal grant to a hospital administered by a religious order. No evidence of sectarian influence was shown.

[10] *Quick Bear* v. *Leupp*, 210 U.S. 50. Federal funds were used to support sectarian education on an Indian reservation. The Court held that the funds were the Indians' own funds held in trust by the Government.

[11] *Cochran* v. *Louisiana*, 281 U.S. 370. Public funds were used to buy textbooks for private schools. The issue was whether or not this amounted to a taking of private property for nonpublic use. The First Amendment issue was not raised.

[12] *Pierce* v. *Society of Sisters*, 268 U.S. 510. A parochial and a private nonsectarian school challenged a State law requiring all children to attend public schools; the law was held to be an unconstitutional interference with the private schools and with the rights of the parents to educate their children based on the due process clause of the Fourteenth Amendment.

[13] *Everson* v. *Board of Education*, 330 U.S. 1. A New Jersey law providing for the transportation of parochial school children to parochial schools was held constitutional.

use religious means where nonreligious means would suffice. Speeches and messages of great Americans, a moment of silence, or the recitation of the Pledge of Allegiance would be adequate substitutes.

2. *The argument.*—Since several versions of the Bible are read in the exercises, the exercises give preference to no particular sect or sects and are therefore unobjectionable.

The rebuttal.—This argument contains several flaws. First, any version of the Bible is inherently sectarian; and second, many persons, some of them deeply devout, object to any version of the Judeo-Christian Bible, while others hold that the Bible must be read in private and that public reading is sacrilegious. The suggestion has been made that the solution to these problems is to develop a common core of theology tolerable to all creeds but preferential to none. This "watering down" of several faiths might easily lead to a new sect—a public school sect—to compete with the other faiths now in existence.

3. *The argument.*—Provisions are made to excuse pupils who do not wish to participate in the exercises.

The rebuttal.—The ceremony itself is ordered and the provision to excuse pupils does not remove the Establishment question and is therefore irrelevant. In addition, the excuse procedure may well tend to prohibit devout children from exercising their right for fear of being considered atheists or nonconformists. Moreover it is well-known that children normally will not refuse to conform to the norms of their group regardless of their personal belief.

4. *The argument.*—If these practices are unconstitutional, "every vestige, however slight, of cooperation or accommodation between religion and government" is forbidden.

The rebuttal.—The Court's decision does not forbid the teaching about religion, tax benefits which aid religious institutions, nondiscriminatory public welfare aid that benefits individuals who become eligible for religious reasons, or activities which were originally religious but have lost their religious character. "In God We Trust" on our currency and references to the divinity in the pledge of allegiance and other patriotic exercises are examples of practices which have lost their religious character.

Nor does the Court's decision forbid religious exercises in publicly supported institutions such as prisons and military posts. The constitutional differences between these exercises in the cases at bar and those in chapels for prisoners and soldiers are obvious: No element of coercion is present in the appointment of chaplains; soldiers and prisoners are not impressionable children and thus are not subject to social pressures to attend or not to attend; and these religious services, unlike school exercises, are designed to provide services where they would otherwise not be available.

Prayers of invocation in legislatures also differ from exercises in public schools: The persons present are adults who can refuse to be present without fear of any repercussions.

Another concurring opinion was written by Mr. Justice Goldberg, in which Mr. Justice Harlan joined. It pointed out that the purpose of the First Amendment is to "promote and assure the fullest possible scope of religious liberty and utterance, for all to nurture the conditions which secure the best hope of attainment to this end." It requires that Government "neither engage in nor compel religious practices, that it effect no favoritism among sects or between religion and nonreligion." Although the state must be neutral in its attitude toward religion, such unfettered neutrality must not lead to secularism and hostility toward religion, which are likewise unconstitutional. Some accommodation between the state and church is permissible, for example, the providing of military chaplains and the teaching about religion in the public schools as distinguished from the teaching *of* religion, but the exercises involved in these cases do not fall into one of the categories of permitted accommodation. In the words of Mr. Justice Goldberg:

> The pervasive religiosity and direct governmental involvement inhering in the prescription of prayer and Bible reading in the public schools, during and as part of the curricular day, involving young impressionable children whose school attendance is statutorily compelled, and utilizing the prestige, power, and influence of school administration, staff, and authority, cannot realistically be termed simply accommodation, and must fall within the interdiction of the First Amendment. . . . (At 1616.)

The lone dissenter in these cases was Mr. Justice Stewart, who stressed his belief that a State cannot constitutionally handicap religion. He agrees with the majority, nevertheless, that the 1st Amendment applies to the States through the 14th Amendment and that Government must be neutral with respect to religion. The Establishment Clause, he believes, prohibits States from giving instruction in tenets of a particular faith but does not prohibit State accommodation to those religious differences which exist in our society. On the Free Exercise Clause, he says, however, States are prohibited from placing "the sanction of secular authority on one or more particular religious or irreligious beliefs." He would require evidence of coercion before declaring any practice an unconstitutional infringement of religious liberty; such evidence was not introduced in the trial of these cases, he says, and cannot be presumed.

The excuse provision, he says, does not negate the possibility of coercion. Although he believes that serious constitutional questions exist in these cases, he could not however decide these issues on the facts presented and would have remanded the cases for the taking of further evidence.

51 Million and More

School enrollments rise for the 19th consecutive year

The Office of Education estimates that enrollment this fall (1963) in the public and nonpublic schools of the United States has increased for the 19th consecutive year and will reach an all-time high of 51.5 million. This will be an increase of 3.4 percent over the 49.8 million enrollment estimate for the fall of 1962. The Office of Education estimates that enrollment at every level of education will increase, from kindergarten through college. There will be more teachers, though the increase will not be large: 1.8 million in both public and nonpublic elementary and secondary schools, and 345,000 in colleges and universities. In 1962 the figures were 1.74 million and 334,000.

In the elementary school—kindergarten through grade 8—there will be 35 million pupils. Of these, 29.4 million will be in regular public schools, 5.4 million in nonpublic. These figures were 28.7 million in public and 5.2 million in private schools in 1962.

In the secondary school—grades 9 through 12—there will be 12.1 million pupils. Regular public schools will enroll 10.7 million, and nonpublic 1.3 million. These figures were 10.1 million and 1.3 million in 1962.

There will be 4.4 million students enrolled in degree-credit programs in institutions of higher education—2.7 million in public and 1.7 million in private institutions. In the fall of 1962 enrollments were 2.6 million and 1.6 million.

Almost 58 percent of the population aged 5 to 34 were enrolled in some type of school in the fall of 1962.

About 64 percent of all pupils entering the 5th grade in 1954–55 graduated on schedule in 1961–62.

In March 1962 the average estimated level of education of Americans 25 years of age or over was 11.4 grades. In 1940 the average was 8.4.

The Nation spent an estimated $32 billion for education during the 1962–63 school year ($29.4 billion in 1961–62), or about 7.0 percent of the national income. Of this total, $19.5 billion supported public elementary and secondary schools, $3.3 billion nonpublic elementary and secondary schools, and $5.1 billion public and $3.9 billion private colleges and universities.

Grants by all Federal agencies to educational institutions, excluding payments for services to the Federal Government, totaled about $2 billion in fiscal year 1963 and $1.7 billion in fiscal year 1962. These figures include expenditures for certain basic research programs, oversea schools for the dependent children of military personnel, education for veterans, training grants, school assistance in federally affected areas, manpower training, and the programs of the National Defense Education Act.

Estimated fall enrollment in educational institutions, by grade level and by type of school: United States, 1962 and 1963

[These estimates are for the beginning of the school year, not the full school year. Fall enrollments are normally smaller than full year enrollments because of new enrollments for the spring semester.]

(In thousands)

Grade level and type of school	Fall 1962 [1]	Fall 1963 [1]
Total elementary, secondary, and higher education	49,812	51,486
Kindergarten through grade 8	34,131	35,000
Public school systems (regular full-time)	28,731	29,400
Nonpublic schools (regular full-time)	5,200	5,400
Other schools [2]	200	200
Grades 9 through 12	11,506	12,100
Public school systems (regular full-time)	10,106	10,700
Nonpublic schools (regular full-time)	1,300	1,300
Other schools [2]	100	100
Kindergarten through grade 12	45,637	47,100
Public school systems (regular full-time)	38,837	40,100
Nonpublic schools (regular full-time)	6,500	6,700
Other schools [2]	300	300
Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment)	4,175	4,386

[1] The 1962 figures for nonpublic and "other" elementary and secondary schools and all 1963 figures are estimates. The enrollment data for nonpublic and secondary schools come from a sample survey and are subject to sampling variations; consequently, the estimates for nonpublic schools are not as reliable as those for public schools or for higher education. The estimates for 1963 are derived from the increases expected from population changes combined within the long-run trend in school enrollment rates of the population.

[2] Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

School Library Services for the Culturally Deprived Child

RICHARD L. DARLING

MANY SCHOOL SYSTEMS have concentrated their effort on improving the culturally deprived child's opportunities to learn on reading instruction. For children who are failing in the regular reading program, they provide remedial reading programs in smaller than usual classes, using special materials—often library books, rather than the prescribed text, and audiovisual materials—selected to meet individual needs and interests. These programs emphasize the use of appropriate materials.

In a recent article on children's reading choices, Ruth C. Smith reports from her research that there is little relationship between the story content of preprimers and primers and children's reading interests as shown in their selection of library books.[1] For the culturally deprived child the content of standard readers may be even more unrelated to his experiences than it is for the average child. Not only may the material lack story interest, but it often uses words and describes environment that are foreign to the child's experience. Teachers working with children from culturally deprived homes report that many of the reading difficulties of these children stem from poor vocabularies. They find that such children are unfamiliar with the words used in beginning readers. Some school systems postpone formal reading instruction for these children until they can acquire an adequate and acceptable speaking vocabulary through special instruction. Other systems, Detroit's for one, have prepared their own primers in an experiment to determine whether culturally deprived children learn to read better using materials which reflect their own backgrounds.[2]

Although school systems recognize the difficulty that culturally deprived children have in using standard materials, few of them are giving adequate attention to providing suitable materials for improving elementary school library collections and services. Yet recent studies and reports emphasize the importance of elementary school libraries and materials in reading instruction. The 1960 White House Conference on Children and Youth, for instance, recommended that programs of instruction be provided for slow-learning children and that these programs include adequate and suitable instructional materials and libraries.[3] According to the recent report, *Learning To Read*, meager libraries and insufficient books are among the reasons why the teaching of reading is sometimes poor.[4] The same report recommends that "boards of education see to it that there is a bountiful supply of suitable books in the school libraries and primary classrooms," so that reading instruction will not be confined to basic readers.[5]

Writing specifically about the educational problems of children from economically deprived neighborhoods, Patricia Cayo Sexton stresses the importance of the school library as a focal point of the school. She suggests that the part of the curriculum that most needs adjusting to meet the requirements of children from lower income families is reading instruction. She recommends that adjustments include ways of encouraging children to pursue their natural interest in reading.[6]

The elementary school library can offer valuable services to an improved reading program for the culturally deprived child. By providing reading materials of greater interest than textbooks to the child, it can help the child extend his speaking and reading vocabulary. The library with a collection representing a wide variety of subjects can satisfy the interest of every child. A good picture book collection is particularly valuable. Picture books have long been used in reading readiness programs, but many more of them should be available for use in programs for culturally deprived children than for other children. Books with appealing illustrations and brief and simple text can be read aloud by librarians and teachers to introduce new ideas and objects and their names to children. The school librarian can read picture story books to children not yet able to read, and can encourage them to select books in the library to take to their classrooms for the teacher to read to the class or to small groups (the teacher can encourage discussion of new ideas in the books related to the children's experience). The library can supplement books with filmstrips and films, story-

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[1] Ruth C. Smith, "Children's Reading Choices and Basic Reader Content," *Elementary English*, XXXIX (March 1962), pp. 202–209.

[2] "New Detroit Primer Stirs National Interest," *Michigan Education Journal*, XL (Nov. 1, 1962), p. 244.

[3] Recommendations: Composite Reports of Forum Findings, Golden Anniversary White House Conference on Children and Youth, Mar. 27–Apr. 2, 1960, Washington, D.C., Washington, U.S. Government Printing Office, 1960, pp. 23–24.

[4] Learning To Read: A Report of a Conference of Reading Experts, Princeton, N.J., Educational Testing Service (1962), p. 4.

[5] Op. cit., p. 11.

[6] Patricia Cayo Sexton, Education and Income: Inequalities of Opportunity in Our Public Schools, New York, The Viking Press, 1961, p. 259.

telling by the librarian, and recordings from its collection. A library with a collection representing a wide variety of subjects can satisfy the interest of each child and can encourage the child to find new interests.

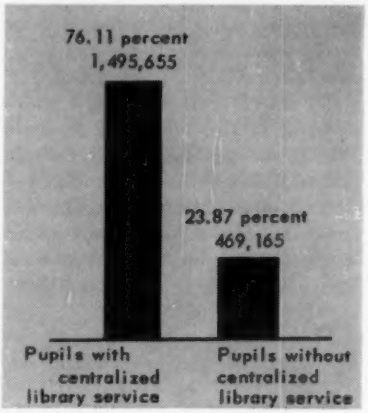
After the culturally deprived child begins to read, the school library can provide him with vital help to progress through library books and other materials as he pursues his own interests. It can assist the teacher in guiding children to materials appropriate in content and difficulty and in relating the materials to the instructional program, and can encourage children to read through displays and exhibits of books and other materials which are related to subjects of interest to the children the library is trying to serve.

The contribution that an elementary school library can make to the education of culturally deprived children depends on the quality of the library. Are elementary school libraries in our large cities—where culturally deprived children are concentrated—meeting library standards? Indications are that they are not. The standards for school libraries set by the American Association of School Librarians,[7] prepared with the cooperation of 19 other national organizations, recommend a minimum library book collection of 6,000 to 10,000 volumes for schools with 200 to 999 pupils, and 10 books for each pupil for larger schools. They also recommend an annual expenditure of $4 to $6 for each pupil. Information from the 1960–61 school year obtained by the Office of Education for its survey, *Statistics of Public School Libraries, 1960–61*, now in preparation, for the school systems of 10 large cities with a population of 500,000 or more indicates that provisions for school libraries in these large urban school systems are far below the standards of the American Association of School Librarians. The 3 graphs opposite show the percentage of elementary school children served by centralized libraries, the average number of volumes for each pupil in centralized libraries, and the average expenditure for each pupil for library books in the 10 cities during 1960–61, in relation to the standards of the association.

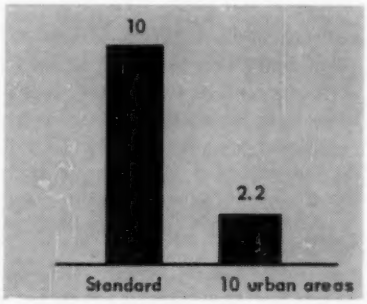
There were, however, great differences between the elementary school libraries provided by the different school systems covered by the study. Only one system provided centralized school library service to all of its elementary school pupils, two had centralized libraries for less than 10 percent of their pupils, and one had no centralized elementary school libraries. In school systems with centralized libraries in at least some of their schools, two had less than one book for each pupil. Only one city had more than five books for each pupil in its centralized school libraries, and it provided centralized school libraries for only 18.14 percent of its elementary school pupils. The expenditure for each pupil ranged from 10 cents for each pupil to $1.83 for each pupil, but only two school systems spent more than $1 for each pupil for library books. Three spent less than 15 cents for each pupil.

The American Association of School Librarians recommends that school systems have 1 librarian for every 300 pupils for the first 900, and 1 librarian for each additional 400 pupils. An Office of Education survey [8] of school library services for the 1958–59 school year reports that school systems with 25,000 or more pupils had 1 librarian for each 2,904 pupils in elementary schools with centralized libraries at that time. In all school systems with 150 or more pupils, the ratio was 1 librarian to 2,248 pupils in elementary schools with centralized libraries. In all school systems with 150 or more

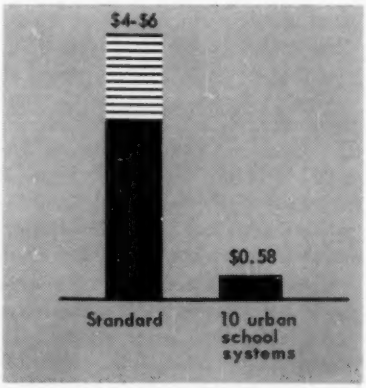
In 10 urban school systems with enrollments of 50,000 and over—



Almost one-fourth of the elementary school pupils were without centralized library services



Centralized elementary school libraries provided only 2.2 books per pupil, far below the recommended 10



The expenditures per pupil for library books averaged only 58 cents, far below the recommended $4 to $6.

[7] American Association of School Librarians, *Standards for School Library Programs*, Chicago, American Library Association, 1960.

[8] Mary Helen Mahar and Doris C. Holladay, *Public School Library Statistics, 1958–59*, Washington, D.C., U.S. Department of Health, Education, and Welfare, Office of Education, 1960.

pupils, the ratio was 1 librarian to 2,248 pupils.

From these figures we know that elementary school libraries in large urban school systems are far below recognized standards and that they are below the level of centralized school libraries in the Nation as a whole. With greater problems, partly because of the needs of culturally deprived children, than schools in smaller centers, these school systems are spending less money on library books and have fewer books per pupil and fewer librarians per pupil.

Though there is no single solution to the educational problems of culturally deprived children, effective elementary school library service is vital to programs for these pupils. Urban school systems need to develop plans for expanding their library programs, providing specialized materials, and employing sufficient numbers of school librarians to administer library programs. Good elementary school library service will cost money. If, as educators have said, the most important breakthrough in education for culturally different children is achievement in reading, the cost for school library services will be small in proportion to possible results.

Schoolchildren can improve their physical condition

Millions of schoolchildren are unquestionably stronger and in better physical conditions than they were 2 years ago: in the 1962–63 academic year 4 out of every 5 of the 26 million in grades 4–12 passed a minimum test of strength, agility, and flexibility, 21 percent more than in 1961–62.

Just as unquestionably the improved condition of many of these children can be attributed, at least in part, to the increased time they spent in physical exercise. Many of them are stronger because their schools acted on the recommendation of the President's Council on Physical Fitness that every schoolchild spend at least 15 minutes a day in vigorous physical exercise. (For details on the Council's recommendation see *Youth Physical Fitness: Suggested Elements of a School-Centered Program*, Washington, U.S. Government Printing Office, July 1961, 40 cents.)

Since the recommendation was made 2 years ago, 13 States have strengthened their physical education programs and 2.1 million more children are taking part in programs. Slightly more than half of these children (1.1 million) were in grades 4–6, where the need for improvement was greatest.

This is the positive side of the picture. The reverse side isn't so bright, for in it we see that many schools are not meeting even the minimum standards recommended. How far short they fall is shown by these facts reported in an Office of Education survey:

★ A count of every fifth child who did not pass the minimum test in 1962–63 adds up to 7 million children. These children are identified as underdeveloped physically even though it is generally agreed that regular periods of exercise would have brought many of them up to standard.

★ Nine out of ten schools offer physical education programs at some grade levels, but fewer than 5 out of 10 offer programs 5 days a week at any grade level—the average is 3 days a week in grades 4 through 10.

★ Schools of all types schedule more time for programs for boys than for girls. Public schools and private non-church-related schools schedule more time than other schools.

★ The physical fitness program is a part of the physical education program in most schools, but 21 percent of the schools have separately scheduled periods of 15 minutes or more for physical exercise. Since the largest proportion of the 15-minute periods are offered in small schools, elementary schools, and church-related schools—the ones least likely to provide for physical education—it is probable that without these periods many schools would have no fitness programs of any kind.

★ Nine out of ten secondary schools and 6 out of 10 schools of all types with 350 or more pupils tested pupils during the 1962–63 school year to determine their physical ability. Approximately 21 percent of the boys and 20 percent of the girls took the 7-item test of the American Association of Health, Physical Education, and Recreation (AAHPER); 69 percent of the boys and 68 percent of the girls were rated satisfactory (at the 60th percentile). The exceptionally high percentage of pupils making satisfactory scores suggests that many schools may have reported the number of pupils who were rated satisfactory on each item rather than satisfactory on all seven items.

★ About 17 percent of the boys and 18 percent of the girls were given a 3-item test to assist officials in identifying the physically underdeveloped; 72 percent of the boys and 77 percent of the girls passed. When the pupils who had failed were retested after special training, 36 percent of the boys and 50 percent of the girls passed.

★ Only 1 school in every 10 offers special programs to meet the needs of pupils identified as physically underdeveloped.

The Office of Education gathered these facts in the spring of 1963 in a survey of a representative sample of physical education programs in public and private elementary and secondary schools. A full report of the survey will be made in *Physical Fitness and the School Age Population*, by J. Scott Hunter, statistician, and Zollie Maynard, specialist in health, physical education, and recreation.

Educational Expenditures
New Studies in the Making

FORREST W. HARRISON
EUGENE P. MCLOONE

CURRENT EXPENDITURES for public elementary and secondary education totaled $12.4 billion in 1959–60—a national average of $376 per pupil in average daily attendance (ADA). The average expenditure per pupil for the States ranged from $206 in Mississippi to $536 in New York. Past studies show that within some States the range in expenditures by districts is often as much as the $330 indicated here as the range in State averages.

Members of boards of education, superintendents of schools, and others use comparisons of school expenditures to answer a variety of questions. If their interest extends beyond minute examination of district expenditures, they turn to comparisons. They might ask such questions as these: Are we spending more or less than our neighbors? Are we at, above, or below the State average in expenditures? How do our expenditures compare with national norms for expenditures? With those of quality districts? With those of districts of similar size or with districts with similar problems?

Officials of local school districts who ask such questions are looking for average practice, for some standard with which their district can be compared. But they seldom stop their inquiry into school expenditures with such general questions or use such a broad starting point. They usually want to know why their expenditures differ from those of other districts. In their search for reasons, they can use information on average salary of teachers, percentage of school budget for salaries of teachers, and pupil-teacher ratio as a broad starting point; generally, however, they will need more detailed information for a sound comparison than is available.

In their analysis of expenditures, they may ask: Are we spending too much, too little, or enough per pupil on administration, instruction, or some other budget category? Are we spending the same percentage of our budget on this item as other school districts or a greater or smaller percentage than others? Such questions on expenditure patterns or the internal balance of school budgets are important to superintendents, business officials, and members of school boards, for they use the answers in determining how to channel funds for necessary school services or whether State regulations are being met.

Too often analyses of school expenditures between school systems are limited by the lack of data. One figure for the Nation and the States, the classroom unit measure, has been made available by the Office of Education on a nationwide basis only once in every 10 years. (The last report, *Expenditures for Education at the Midcentury*, by Clayton D. Hutchins and Albert R. Munse, was published in 1953; copies are available from the U.S. Government Printing Office, Washington 25, D.C., for 65 cents each.) Other more refined measures have been collected for some school districts in an area regularly, or on a statewide basis occasionally, but not for the Nation. Now, however, the Office is making expenditure studies which will include more comprehensive analyses and which will enable others to make analyses not previously possible. The data for these studies were obtained from districts for the 1959–60 school year to provide expenditure figures per classroom unt for 1959–60 on a basis compa- at 10-year intervals. Results of analyses of these data will be reported in a series of Office of Education publications. In this article we describe some measures of expenditures based on average practice on both a nationwide and a statewide basis and other kinds of information to be reported and the form in which the data will be presented.

FIGURES on classroom unit expenditures for a district indicate where it stands in relationship to other districts in the State and also in relationship to the national average. With figures on classroom unit expenditures, it is possible to calculate the amount of funds required to raise the expenditures in all school districts in a State or in the Nation below a given standard up to that standard. This amount required to meet the standard can be expressed as a percentage of current expenditures. The table below shows for 1949–50 and for 1959–60 the percentage of current expenditures that would be required to raise all States (1) below the national median expenditure per classroom to that median, (2) below national

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average current expenditure per pupil to that average, (3) below the national average salary for teachers to that average (4) below the national pupil-teacher ratio to that ratio, and (5) below the national percentage that expenditures for salaries of teachers are of current expenditures to that percentage. The sum of the percentages required (shown in line 3 of the table) for raising States below three of these averages—average pupil-teacher ratio, average salary, and average percentage of total expenditures on other than teacher salaries—to these averages separately is greater than the percentage of current expenditures required to raise all States to the national average current expenditures, which considers all three items together. For 1949–50, the amount of funds required to raise States below the national standard can be compared with the amount of funds required merely to raise the expenditures per classrom unit generally.

Percentage of current expenditures required to raise States below U.S. average on selected variables to that average, 1949–50 and 1959–60

Item	Percent of current expenditures	
	1949–50	1959–60
U.S. median expenditure per classroom unit	15.28	.....
U.S. average current expenditure per pupil in ADA	10.49	9.18
Sum of three items below	16.03	13.56
U.S. average salary for instructional staff	7.57	6.95
U.S. average pupil-teacher ratio	5.14	4.05
U.S. average percentage of other than teachers' salaries	3.31	2.56

Source: Computed from *Biennial Survey of Education*, 1949–50 and 1959–60. Percent for classroom units from *Expenditures for Education at the Midcentury*.

The division of expenditures into these three broad categories provides more information than the usual statistics on average current expenditure per pupil. These calculations, except for the 1949–50 classroom unit expenditure, are based on information from the *Biennial Survey of Education*. They use State averages and not individual district information. If information on individual districts were available, it could be compared with a national standard and the State average, and the district's place on a nationwide and statewide distribution of school districts could be determined. Such individual district information is being analyzed by the Office of Education for the 1959–60 school year and will be reported in one of the Office studies.

In a recent study of the relationships of current expenditures per pupil, salaries of teachers, and the pupil-teacher ratio, the Educational Policies Commission says:

> In a school district of adequate size the annual current expenditure per pupil needed today to provide a good educational program is about 12 percent of the salary necessary to employ qualified beginning teachers in that district.[1]

This formula is based on five assumptions: (1) A standard can be set for staff size in relation to enrollment, (2) a standard can be set for the starting salary required in any community to attract competent beginning teachers—a salary equal to average pay for similar qualifications in other work in the community, (3) the average salary of a professional staff member can be derived from the average beginning salaries, (4) average expenditure per pupil for professional services can be derived from the staff size and average salary, and (5) the per-pupil cost of the professional staff can be related to the total budget required for current operations.

These assumptions are reflected in the relationships of expenditures per pupil to variables in the five standards. Current expenditures per pupil in ADA are a product of (1) the pupil-teacher ratio, (2) the percentage that expenditures for teachers' salaries are of current expenditures, and (3) the average salary of teachers. The respective symbols for expression as a formula are: (1) $P-T$, (2) $\overline{S}$, (3) $\%$, and (4) CE for current expenditures per pupil in ADA. Then:

$$CE=\frac{1}{P-T}\times\overline{S}\times\frac{1}{.\%}$$

which can be read as:

(Current expenditures per pupil in ADA) =
(One over pupil-teacher ratio) ×
(Average salary of teachers) ×
(One over the percentage that expenditures on teachers' salaries are of current expenditures.)

This method of calculating a classroom unit keeps the pupil-teacher ratio constant. In this method of comparing expenditures, the nationwide average practice of staffing is used for all school districts. Other standards can also be used, such as the average practice in a State. In nationwide studies, the State with the lowest pupil-teacher ratio could be used, or the State with the median pupil-teacher ratio, that is, the State whose pupil-teacher ratio is such that half of the States have a higher ratio and half, a lower ratio. Similarly, in either nationwide or statewide studies, district data could be used; for

[1] *An Essay on Quality in Public Education*, Educational Policies Commission.

example, data on a group of school districts that rank at some point on a distribution of pupil-teacher ratios, or a group of school districts that have high, average, or low expenditures in either current expenditures per pupil in ADA, or in average salary for teachers. Each approach to measuring expenditures is appropriate for different comparisons of school expenditures.

The Office presentation of data will provide not only the classroom unit distribution but also distributions of districts on several other variables. Pupil-teacher ratios will be presented nationally and State by State for elementary and secondary pupils, separately and combined. For 10 sizes of enrollment, pupil-teacher ratios also will be computed on a nationwide basis. For each State, the increased need for teachers because of sparsity of school population which results in lower pupil-teacher ratios will be indicated by a "sparsity" line for elementary and secondary schools. This information will make it possible for the States to compare themselves with other States and with the average for the Nation and to compare the pupil-teacher ratio derived from actual practice with ratios specified for State-aid distribution formulas.

The presentations of school districts by current expenditures per pupil in ADA, pupil-teacher ratio, average salary of teachers, and the percentage that salaries of teachers are of total expenditures will differ from the usual presentations where each variable is calculated separately. These data should be useful to school officials since the variables are related and are reflected in the internal balance of the school budget, as is shown above.

For instance, with districts arrayed by current expenditures per pupil in ADA, the pupil-teacher ratio, average salary of teachers, the percentage that salaries of teachers are of current expenditures, and the percentage of revenue raised locally will be provided at the 90th, 75th, 50th, 25th, and 10th percentiles as well as for the high and low district nationally and in each State. This information will enable districts to compare their expenditures with those of districts which spend at the same rate, with districts in their own or in any other State. A district can determine whether its pupil-teacher ratio is the same as that of districts in its expenditure group, or higher or lower. It can similarly examine other variables. Since each distribution by the control variable—current expenditures per pupil in ADA in our illustration—gives values for the remaining variables, it is possible for a district to determine how the internal balance of its budget differs on these key variables from districts which it resembles in the control variable.

With these distributions, officials can examine some of the reasons for the differences that exist among and within States on expenditures per classroom unit. They may find that expenditures per classroom unit may vary because pupil-teacher ratios, or average salaries, or percentage of total expenditures for salaries of teachers vary from the national norm.

Finally, correlations of expenditures for various budget categories such as instruction, administration, attendance and health services, transportation, operation and maintenance, both as per pupil amounts and as percentages of total expenditures with each other and with the number of pupils in ADA will reveal the internal budget balance, the degree to which percentages or per pupil amounts are better for comparisons, and the size of system at which expenditures are unaffected by an increase or decrease in the number of pupils.

The interrelationships revealed by the correlations and arrays of districts on control variables by individual school districts in the Office publications will permit better comparisons than those from data usually available. Examination of the position of a district on the various distributions may reveal some of the reasons for various expenditures. But more important, the interrelationships revealed will enable researchers making future studies and future presentations of data to concentrate on more meaningful variables. For instance, the identification of three groups of districts will enable the researcher to contrast the budget patterns of high, average, and low groups of school districts directly from the data. The identification of these groups will make it possible for more detailed studies to find out which internal balance of the budget is best, the effect of State aid on each group, and significant differences between these three groups in budget patterns and expenditures for various budget categories.

The main purpose of the Office of Education in making these studies is to make available comparable statistics on expenditures for all districts, to explain some of the difference in the expenditures, and to discover some of the influences on expenditures. We have not dealt with many of the limitations of the data and some of the problems in interpretation, since our purpose here is merely to describe the information that will be available so that local and State school officials can be aware of the forthcoming data and can plan to use whatever they find helpful. The data presented and the techniques used are familiar to school finance researchers. Aside from the expenditures per classroom unit, neither the type of data presented nor the technique of analysis has been attempted on a nationwide basis. In the end, however, the ultimate values of the research studies described here will be determined by the use that school officials throughout the Nation make of them.

AD Minutes Briefly noted--- for the busy School Administrator

Material for this department is prepared by the staff of the School Administration Branch, Division of Elementary and Secondary Education

In California, rising college expenses continue to outstrip expanding aid resources, the State Scholarship Commission reports. Even though the maximum amount of scholarship assistance has been raised from $600 to $900 during the last 6 years, the percentage of tuition and fees covered by even a maximum award has decreased. For example, in 1956 the $600 scholarship award covered 80 percent of the tuition and fees at the California Institute of Technology, in 1962, the $900 scholarship award covered only 56 percent of the expenses at that institution.

Of the 900 men and women who completed teacher training courses at Penn State University in 1963, 56 percent are very likely teaching in Pennsylvania this fall; 16 percent in New Jersey; 6 percent in New York; and 9 percent in other States. The remaining 13 percent are very likely entering other occupations. These figures are reported by the teacher placement service at the university.

University officials express the hope that a greater proportion of the graduates will remain in Pennsylvania now that the State legislature has passed a bill raising starting salaries of teachers from $3,600 to $4,300. The increase moves Pennsylvania from 21st to 15th place among States.

An advisory council, consisting of a teacher representative from each school in Charlotte-Mecklenburg District of North Carolina, has been formed for the purpose of facilitating internal communication among the professional staff. Specifically, the council, which meets five times a year, is designed to promote two-way communication between the central office staff and teachers in local schools.

Between 1947–48 and 1961–62 the number of public schools in Louisiana decreased by 928, from 2,349 to 1,421, a recent Louisiana State Department of Education Bulletin on the school consolidation program reports. For every 10 schools operating in 1947–48, approximately 6 schools were operating in 1961–62. During that period, enrollment increased by 65 percent, from 442,600 in 1947–48 to 732,640 in 1961–62. In 1961–62, 80 percent of all public school pupils were enrolled in schools with 200 or more pupils in contrast to only 28 percent in 1947–48. The report forecasts that at the present rate of progress, the small school enrolling 200 or fewer students will be virtually eliminated within a few years.

The "show and tell" method used by children in the lower grades has been adapted by the Cincinnati city schools as a regular means of informing school board members of trends and developments in instruction and curriculum. The board devotes alternate meetings of its regular Monday afternoon sessions to observing demonstrations by teachers or teachers and pupils. Each presentation is planned to last approximately 30 minutes. After each presentation, board members usually discuss the problems and issues involved in it. The meetings are open to newspaper reporters and other citizens.

The Connecticut State Board of Education has authorized a 2-year study which may lead to the adoption of statewide standards for public schools. Ten towns and a regional high school district have offered their staffs and facilities to develop their own standards for the 2-year trial period. Proposed standards will be submitted to the State general assembly at the end of the trial period. William J. Sanders, State Commissioner of Education, has emphasized that the public school standards finally adopted in the State should not have the force of law.

***The Search for Economy*, a booklet** issued by the State Education Department of New York, discusses nine areas in which economies in the management of local school district income and expenditures may be made. True economy, the publication says, is the wise use of resources to achieve an objective, and in education the objective is to provide opportunities for the full development of the abilities and talents of every pupil. The document was prepared by the staff of the department, under the leadership of Maurice G. Osborne, director, division of school business management.

The New Jersey State Department of Education has been awarded a research grant of $15,000, by the New World Foundation, to conduct a study of the effect of paperback books on curriculum and instruction in that State. Fifty elementary and secondary schools will participate in the study. Teachers in these schools will keep careful daily records based on their observations of students' performance, response to and attitudes toward various uses of paperbacks.

The need for the study evolved from a growing interest throughout the State in the variety and enrichment potential of paperbacks for elementary and secondary schools.

The San Diego Teachers Association plans to develop a systematic long-term inservice training proposal for the 4,200 teachers in the district. The Association has prepared a 20-page workbook containing many questions designed to stimulate their thinking about ways to increase their competence as teachers. Each teacher has been requested to record personal goals for professional growth in the workbook. The responses from the teachers, to be analyzed by the association, will form the basis for a tentative set of goals for development of a systemwide program of inservice training.

Massachusetts is the 43d State to adopt a new financial accounting system based on the Office of Education Handbook II, *Financial Accounting for Local and State School Systems* and *Suggested Coding of Expenditures for Public Schools.* A manual on the new system, *Financial Accounting for the Public Schools of Massachusetts,* published by the State department of education, will be used by all public schools in the State next year. This means that all schools will be coding their revenues and expenditures uniformly.

The State department tried out the new accounting system in 11 local school systems for a year before adopting it for statewide use.

Six States—Arkansas, Georgia, Oregon, South Carolina, Virginia, and Wyoming—are studying their public education systems.

The 1963 Arkansas General Assembly has directed the State board of education to make a comprehensive study of the operations and effects of the minimum foundation program and to report its findings and recommendations not later than December 1, 1964, to members of the 65th General Assembly.

Representatives of four national organizations—the American Association of School Administrators, the National School Boards Association, the Association of School Business Officials of the United States and Canada, and the Council of Chief State School Officers—met with Office of Education staff* in Washington in August to plan a manual of financial accounting principles and procedures for public school officials. The first draft of this manual will be reviewed at a national conference next spring. Joseph A. Perkins, Jr., is the Office of Education specialist assigned to the project for preparing this handbook, the fifth in a series (for a description of the procedure followed in preparing the handbooks, see the May issue of *School Life,* "Needed—Better School Financial Accounting").

In Georgia the Governor's Commission for Efficiency and Improvement in Government is making a study of the State department of education, encompassing the administration of public education. The study will cover such areas as teacher training and certification, curriculum, research, statistics, data processing, textbook purchasing, libraries and audiovisual administration, school bus transportation and insurance, school accounting, and surplus property.

The 1963 General Assembly of South Carolina, by a concurrent resolution, provided for the appointment of a nine-member committee to study the educational system in the public schools of the State.

The Virginia School Boards Association, in cooperation with the State board of education, local school superintendents, and the College of Education of the University of Virginia, recently began a study in each local school district projecting educational needs and costs for the next 5 years.

Oregon's Interim Legislative Committee on Education will conduct a study to determine the necessary functions of its State department of education and to evaluate the department's activities.

And in Wyoming a Governor's Committee on Education has been formed to develop recommendations for the improvement of public school education in the areas of finance, organization, educational progress, and special problems. John Gates, dean of adult education and community studies at the University of Wyoming, is serving as executive secretary. The director and coordinator of the statewide research project is Walter C. Reusser, Deputy Superintendent of Public Instruction.

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* Those in attendance when this photograph was taken were, *clockwise beginning lower left,* Pinkney J. Newell, Jr., American Association of School Administrators (AASA); Harry Faris, National School Boards Association (NSBA); Alvin L. Gitlitz, Association of School Business Officials of the United States and Canada (ASBO); Alwin J. Schmidt, Council of Chief State School Officers (CCSSO); Joseph A. Perkins, James E. Gibbs, Ralph C. M. Flynt, and Allan R. Lichtenberger, all of the Office of Education; Philip S. Shaw, CCSSO; Roderick F. McPhee, AASA; Elliott Norwalk (NSBA); William H. Curtis, AASA; Joseph P. McElligott, ASBO; Samuel J. Broad, former president, American Institute of Certified Public Accountants; James W. Whitlock, Division of Surveys and Field Services, George Peabody College for Teachers; and Reginald J. Crockett, Montgomery County (Md.) public schools.

Statistic of the Month

Higher Education—Students, Institutions Fall 1962

Nearly 4¼ million students were enrolled for degree credit in 2,043 institutions of higher education in the United States in the fall of 1962. Publicly controlled institutions, though they make up only 35.7 percent of the total number of institutions, enrolled 61.2 percent of the students. In more detail, the percentages were as follows:

Type of institution	Percent of total degree-credit enrollment	Percent of total institutions
Public:		
State	45.4	19.1
District or city	15.8	16.6
Private:		
Independent of church	20.8	23.1
Denominational:		
Protestant	9.0	23.5
Roman Catholic	8.4	16.4
Other	.6	1.3

The average enrollment per institution was 2,059. For the several categories of institutions the averages were as follows:

Type of institution	Average enrollment
Public:	
State	4,901
District or city	1,964
Private:	
Independent of church	1,855
Denominational:	
Protestant	782
Roman Catholic	1,057
Other	911

Twenty-seven denominational institutions made up the group classified above as "Other." Ten were Jewish; 9, interdenominational; 4, Latter day Saints; 1, Unitarian; 2, Russian Orthodox; and 1, Greek Orthodox.—Rose Marie Walker, educational statistician.

Number of institutions of higher education, by institutional control, fall 1962: United States and outlying parts

State or outlying part	Total	Public		Private			
		State	District or city	Independent of church	Denominational		
					Protestant	Roman Catholic	Other
Total	2,043	390	339	472	481	334	27
Alabama	26	9		4	10	3	
Alaska	3	1			2		
Arizona	7	3	2	1	1		
Arkansas	19	8		3	8		
California	167	17	66	35	28	18	3
Colorado	21	7	6	1	4	3	
Connecticut	27	5	1	10	1	9	1
Delaware	4	2		1	1		
District of Columbia	22	2	1	9	2	8	
Florida	44	6	23	9	4	2	
Georgia	46	19	1	9	16		1
Hawaii	4	1			1	1	1
Idaho	9	3	2		2	1	1
Illinois	108	6	17	33	30	20	2
Indiana	40	4	1	11	15	9	
Iowa	51	3	16	7	16	8	1
Kansas	45	5	16	1	16	7	
Kentucky	36	6	2	8	14	6	
Louisiana	21	10		2	3	6	
Maine	19	7		8	1	3	
Maryland	43	9	11	11	3	8	1
Massachusetts	92	17	4	49	4	18	
Michigan	64	9	16	12	13	14	
Minnesota	43	6	10	6	12	9	
Mississippi	45	9	16	3	16	1	
Missouri	62	7	7	12	23	13	
Montana	11	6	2		1	2	
Nebraska	23	5	5	3	7	3	
Nevada	1	1					
New Hampshire	10	3		4		3	
New Jersey	38	7	2	12	7	9	1
New Mexico	9	7				2	
New York	166	18	18	54	10	58	8
North Carolina	59	12	5	5	35	2	
North Dakota	14	9	2		1	2	
Ohio	67	6	3	22	20	14	2
Oklahoma	33	18	6	2	5	2	
Oregon	27	7	3	5	7	4	1
Pennsylvania	125	14	1	51	31	26	2
Rhode Island	11	2		5		4	
South Carolina	29	6		7	16		
South Dakota	16	7		1	6	2	
Tennessee	46	7		14	24	1	
Texas	96	17	34	8	29	8	
Utah	6	4					2
Vermont	14	4		7	1	2	
Virginia	43	11		9	22	1	
Washington	29	5	12	2	5	5	
West Virginia	20	11		4	4	1	
Wisconsin	61	10	23	10	4	14	
Wyoming	6	1	5				
U.S. Service Schools	8	8					
Canal Zone	1	1					
Guam	1	1					
Puerto Rico	5	1		2		2	

Total degree-credit enrollment in institutions of higher education, by institutional control, fall 1962: United States and outlying parts

State or outlying part	Total	Public		Private			
		State	District or city	Independent of church	Denominational		
					Protestant	Roman Catholic	Other
Total	4,206,672	1,911,211	665,825	875,502	376,366	353,167	24,601
Alabama	47,654	34,556		3,636	7,373	2,089	
Alaska	3,878	3,549			329		
Arizona	43,736	35,029	7,966	262	479		
Arkansas	30,878	22,753		3,034	5,091		
California	551,524	192,340	274,397	49,463	16,191	18,625	508
Colorado	52,640	36,966	5,418	1,385	6,793	2,078	
Connecticut	59,092	24,069	248	30,386	78	4,080	231
Delaware	8,979	7,788		746	445		
District of Columbia	51,155	3,752	1,459	22,620	9,425	13,899	
Florida	89,802	33,844	27,752	21,422	5,728	1,056	
Georgia	56,228	38,019	258	4,691	13,155		105
Hawaii	12,999	11,575			181	352	891
Idaho	13,912	8,209	2,660		1,748	25	1,270
Illinois	230,115	75,043	46,376	58,040	21,405	28,874	377
Indiana	111,861	68,364	661	15,723	14,222	12,891	
Iowa	64,928	28,076	4,340	11,756	13,682	6,253	821
Kansas	59,900	32,575	15,937	83	7,682	3,623	
Kentucky	53,361	28,153	7,391	4,376	7,611	5,830	
Louisiana	66,692	51,022		7,989	3,434	4,247	
Maine	15,025	9,078		4,563	811	573	
Maryland	65,110	33,742	6,344	17,364	1,889	5,541	230
Massachusetts	155,647	27,091	1,896	105,496	1,544	19,620	
Michigan	182,827	118,500	27,753	10,033	10,980	15,561	
Minnesota	89,301	64,362	3,415	3,926	9,706	7,892	
Mississippi	41,163	24,962	8,925	487	6,717	72	
Missouri	96,851	40,187	7,156	22,593	11,656	15,259	
Montana	14,997	12,647	179		407	1,764	
Nebraska	36,379	16,548	9,389	863	5,658	3,921	
Nevada	4,761	4,761					
New Hampshire	13,176	6,205		5,068		1,903	
New Jersey	101,419	44,971	5,326	31,792	5,097	14,050	183
New Mexico	20,839	19,630				1,209	
New York	395,174	53,739	91,158	183,671	6,789	54,987	4,830
North Carolina	84,387	45,231	2,588	8,180	27,568	820	
North Dakota	16,026	14,659	800		417	150	
Ohio	202,374	80,583	34,720	39,225	24,626	22,457	763
Oklahoma	63,697	50,563	1,101	5,437	6,405	191	
Oregon	51,948	40,422	811	3,061	4,427	2,793	434
Pennsylvania	214,244	31,062	270	122,139	21,933	38,665	175
Rhode Island	22,699	10,371		8,123		4,205	
South Carolina	35,142	20,040		5,300	9,802		
South Dakota	16,409	11,819		350	3,685	555	
Tennessee	72,844	44,248		13,267	14,556	773	
Texas	216,641	103,953	45,541	21,479	38,744	6,924	
Utah	38,940	25,157					13,783
Vermont	11,123	5,151		3,896	541	1,535	
Virginia	65,944	45,182		5,859	14,521	382	
Washington	77,491	42,458	17,426	2,512	7,933	7,162	
West Virginia	33,700	25,877		4,079	3,225	519	
Wisconsin	87,403	59,361	4,028	5,783	1,677	16,554	
Wyoming	7,707	5,571	2,136				
U.S. Service Schools	14,214	14,214					
Canal Zone	483	483					
Guam	1,247	1,247					
Puerto Rico	30,006	21,454		5,344		3,208	

USOE Cooperative Research

FRANCIS A. J. IANNI

The Cooperative Research Branch is pleased to have, through this column, the opportunity to inform *School Life* readers of the activities of the cooperative research program and of findings from research supported by the program. In future issues we plan to report on specific research projects. In our introductory column, however, we wish to explain the nature, purpose, and scope of the cooperative research program.

Since the end of World War II, awareness of the great need for scientific research in education and related areas as a basis for sound educational practice has been steadily increasing. Recognition of this need led the 83d Congress to provide, under Public Law 531, for a research program. This law authorizes the Commissioner of Education "to enter into contracts and jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education." Although the law was signed by the President on July 28, 1954, funds were not appropriated for its administration until fiscal year 1957. For the first year of operation, approximately $1 million was appropriated, and for the second year, $2.3 million. Since that time the appropriations for the program have continued to grow, and in fiscal year 1963 the budget, exclusive of some special foreign currency items, was $7 million.

Research conducted under the program in the past 6 years has provided new knowledge for education and has also created a research environment favorable to the development of new educational ideas. As a result of these activities, many leads to the solution of persistent educational problems have been found.

In the early years, the program used most of the funds to support research in 10 areas of interest which the Office of Education considered particularly important, although it supported projects in other important areas of education. In recent years, however, the program has encouraged researchers representing a wide variety of interests relevant to education to apply for support. As a result, the program is servicing expanded research areas and supporting projects in many fields of basic knowledge, projects which hold promise of important contributions to the educational process. Moreover, growing numbers of behavioral and social scientists are involved in the research sponsored by the program; sociologists, psychologists, anthropologists, political scientists, philosophers, economists, and others have joined with educational researchers in investigating the problems of education. The program has not only attracted such researchers—new research talent to educational problems—but has also helped to provide training ground for young educational researchers and to continue the support of established researchers.

This year the program has again revised its procedures and expanded its scope. The new plan includes six areas of research activities: (1) Basic and applied research, (2) curriculum improvement, (3) demonstrations, (4) research and development centers, (5) small contracts, (6) and developmental activities.

Basic and applied research studies have constituted the major proportion of the projects supported by the program and have included the following types of research: Controlled experimental, survey, correlational, methodological, case study, developmental, and historical. The studies have covered various phases of such subjects as mental retardation, aptitudes and abilities, cultural deprivation, comparative education, programed instruction, administration, and school finance.

The curriculum improvement program includes projects dealing with a curriculum, a program, a course, a subject, or any aspect of these. In the past, support has been restricted to projects in English and the social studies; now however, proposals will be considered in any content area of education. Curriculum improvement projects should be designed to achieve one or more of the following purposes:

1. To clarify or redefine the nature and aims of a content area.
2. To develop sequential patterns in a content area based upon factors of human growth and development and on the teaching-learning process.
3. To develop instructional materials and methods that will achieve general and/or specific aims within a content area.
4. To evaluate the effectiveness of the materials and methods that have been developed.
5. To disseminate the most promising materials and methods to interested individuals and groups throughout the country.

The existing program for demonstrations is being broadened considerably. Its major purpose is to publicize, through demonstrations, applications of new educational techniques and materials which have been developed through previous research.

This year we are establishing research and development centers in order to concentrate human and financial resources on a particular problem area in education over an extended time. Centers will conduct basic research, translate research findings into educational procedures

Dr. Ianni is Director, Cooperative Research Branch, Office of Education.

which will then be evaluated, and inform the educational community, through various means, about research findings and new educational procedures. In order to achieve these goals, staff members of the centers will maintain close contact with persons in schools, State departments of education, institutions of higher education, Government agencies, and professional organizations. They will also have cooperative working arrangements with teachers and other instructional staff members when they work in or with schools. We hope that these centers will make significant contributions to the understanding of a particular problem area and to the subsequent improvement of related educational practices.

The small contract program, which is also being initiated this year, is designed to provide support for small-scale research or development projects with minimum delay in the review of proposals. The following are examples of the types of projects eligible for support: (1) Experimental research, surveys, and field studies; (2) pilot or exploratory studies; and (3) analyses of existing data.

The developmental activities program is stimulatory. Its general purposes are to promote high quality research and development projects in particular areas of education, to secure large-scale collaborative attacks on unusually pressing problems, and to increase the competence of persons engaged in educational research. Among the types of activities supported under the developmental program are analytical and integrative reviews of research literature; conferences on planning and design of research; dissemination of findings; development of experimental devices and materials, new evaluative instruments and techniques; and development of taxonomies, models, and theories. Though participation is by invitation only, individuals or groups having ideas for developmental activities may get in touch with a member of the cooperative research staff.

Persons wishing to submit applications under any of the programs may obtain additional information about application and review procedures by writing to the Cooperative Research Branch.

School Library Reporter

MARY HELEN MAHAR

A 5-YEAR PROJECT to demonstrate what a good school library can do for a school's instructional program enters its first phase this fall, in two elementary schools—the Central Park Road School in Plainview, Long Island, N.Y., and the Marcus Whitman School in Richland, Wash. Both schools have been selected because they are already far along the road to meeting the standards of excellence for school libraries recommended by the American Library Association. Three elementary schools less advanced will be added to the project in 1964, and three secondary schools will be added in 1964 or 1965. The American Association of School Librarians is administering the project for the American Library Association with a $1,130,000 grant from the Knapp Foundation.

Impetus for the project came from *School Library Statistics, 1958–59* (USOE publication No. 15020), which reports that more than 10 million children are in elementary schools with no centralized libraries and that millions of other children are in elementary and secondary schools with libraries far below the recommended national standards. Such facts as these convinced the Knapp Foundation of the need for a program that could eventually strengthen school library service to education throughout the Nation.

Phase I, now under way in the Plainview and Richland schools, will last for 2 years. The foundation is providing funds to bring the libraries up to standard in personnel, materials, services, and facilities, and to pay expenses of 12 teams of 6 observers each in both years of the project. Neighboring teachers' colleges are cooperating with the schools. Columbia Teachers College is working with Plainview, and Eastern Washington State Teachers College with Richland, helping teachers in the demonstration schools learn to use library materials effectively and giving student teachers from the colleges an opportunity to observe the program in action.

Phase II, involving three more elementary schools, will begin in 1964 and will last for 3 years. Phase III, involving three secondary schools, will begin in 1964 or 1965 and will last for 2 years. In both phases the provisions and procedures will be similar to those in phase I.

Schools for phases II and III will be selected as they were in phase I, on the basis of their accessibility to a teacher education institution willing to cooperate in the program, the availability of transportation and other facilities necessary to the program, and the willingness of the administrators and teachers to support and develop a good school library program. Schools interested in taking part in the program may obtain information and application blanks from the Knapp school libraries project, American Library Association, 50 East Huron St., Chicago 11, Ill.

PROJECT TALENT, a study being carried out by the University of Pittsburgh under USOE's cooperative research program, is turning up evidence that pupils in schools with good

Miss Mahar is Coordinator of School Library Services, Office of Education.

libraries are more likely than other pupils to stay in school, to do well there, and to go on to college.

The study has found that a student's achievement in most subjects can be predicted with a high degree of accuracy on the basis of two facts: How able he is and how much opportunity he has had to read and learn about the subjects. For example, the most important factors in high achievement in English have been found to be these:

1. Being in an academic curriculum.
2. Having well-paid and experienced teachers.
3. Having access to an adequate library in the school.
4. Having considerable homework.
5. Having study halls.

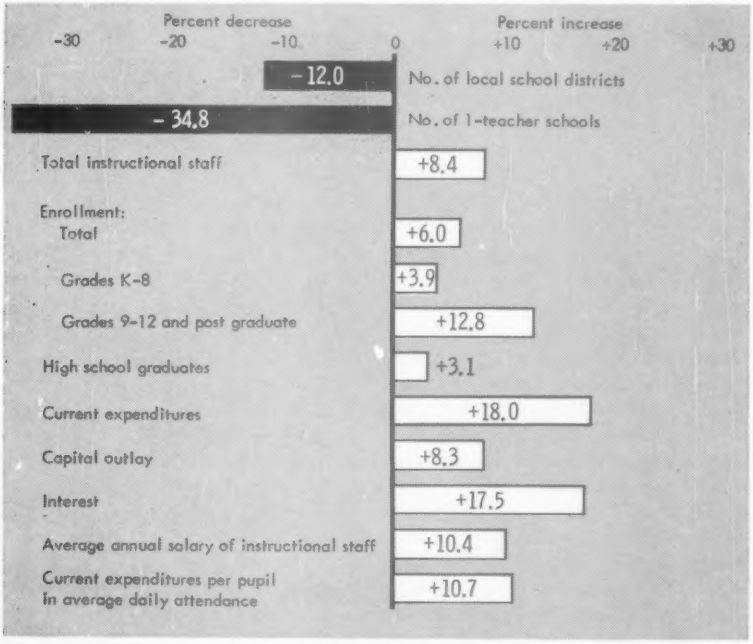
The number of books in the school library, the data also show, is one of the four most important factors in a school environment associated with a pupil's staying in school, his achievement, and his going on to college (the other three are teacher salaries, teacher experience, and school expenditures per pupil).

These conclusions are supported by data in the latest report from Project Talent, *A Survey and Followup Study of Educational Plans and Decisions in Relation to Aptitude Patterns: Studies of the American High School*, Cooperative Research Project, No. 226.

Growth Continues In U.S. Public Schools

Public elementary and secondary education was a bigger enterprise than ever in the school year 1961–62. A report recently issued by the Office of Education (*Preliminary Statistics of State School Systems, 1961–62*, by Carol Joy Hobson and Samuel Schloss) shows that the year set new records in the size of the school-age population, enrollments, instructional staff, and costs. Even the items that decreased reflected gains: The 12-percent decrease from 1959–60 in the number of local school districts (the decrease was predominantly in small districts) and the 35-percent decrease in the number of 1-teacher schools mean that thousands of school children have better facilities and broader programs.

The extent of growth represented by the data for 1961–62 is measured here by some comparisons with 1959–60. The chart shows percentage changes in the data for public school systems; the tabulation below shows numbers and amounts:



Some of the changes that took place in the public schools of the United States between 1959–60 and 1961–62

Public school systems: Selected data, 1959–60 and 1961–62

Item	1959–60	1961–62 [1]
Local districts	40,520	35,650
1-teacher schools	20,213	13,170
Instructional staff	1,464,031	1,586,700
Enrollment:		
K–8	27,601,902	28,686,000
9–12 and post-graduate	8,484,869	9,568,000
H.S. graduates	1,627,050	1,678,000
Revenue receipts ($1,000):		
Federal	651,639	754,915
State	5,768,047	6,818,651
Local	8,257,089	9,847,397
Other	69,843	79,157
Total	14,746,618	17,500,120
Current expenditures ($1,000)	12,461,955	14,711,051
Capital outlay ($1,000)	2,661,786	2,883,000
Interest ($1,000)	489,514	575,000
Average salary, instructional staff	$5,174	$5,710
Current expenditures per pupil in ADA	$375	$415

[1] Preliminary; estimates have been made for nonreporting States.

As an operating figure for the year just beginning—1963–64—the Office has estimated the enrollment in the opening week of school. These estimates are given on p. 17.

Statistics of Nonpublic Schools

DIANE B. GERTLER

Interest in nonpublic schools has been heightened by a number of factors, among them rising school taxes, school integration, a revival of general interest in religious matters, rising family income, and increasing competition among students. Moreover the interest is widespread: The general public wants to know about different systems of schooling, legislators about the size of nonpublic schools and their significance in the general field of secondary education, and nonpublic school officials and patrons about how their schools fit into the scheme of American education.

In response to these interests the Office of Education has canvassed all nonpublic secondary schools in the 50 States, the District of Columbia, and all outlying territories, and has compiled basic data on 99 percent of all the schools (4,128) and 99.5 percent of all pupils (1,109,443) they enrolled during the 1960–61 school year. The survey is reported in Statistics of Nonpublic Secondary Schools: 1960–61 *(OE–20050), Washington, D.C., U.S. Government Printing Office, 1963, 55 pp., 40 cents. Mrs. Gertler has drawn on the survey for the material in her article.*

IT would be hard to describe a typical nonpublic school, for there is considerable variation among the 4,128 now operating. They vary in age and aims, in size and teaching methods, in price and prestige, in religious affiliation, and in numerous other ways. Some are similar to public schools in the same geographic areas, and others specialize only in certain programs.

Some nonpublic schools (2.6 percent) were founded before 1850, some (16 percent) between 1850 and 1899, and the others after 1900. Most of the older schools are located along the eastern seaboard, but one of the oldest is in our newest State—the Punahou School in Hawaii, founded in 1841. The operation of those older schools over so long a period indicates that there has been a continuing demand for the kind of schooling they offer. The other schools are located throughout the country, and their development reflects the expansion of secondary schools as a whole during the 20th century. Though nonpublic schools are still increasing in size and number, their growth has been small compared with the enormous growth of public high schools.

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Numbers and kinds of schools

Of the 4,128 nonpublic secondary schools in the United States and outlying areas, 81 percent (3,328) are church related and 19 percent are "independent" of any religious group. The relationship of the fostering religious organization to the church-related schools ranges in degree from complete control of curriculum and school policy to mere acknowledgement of denominational efforts and financial assistance in establishing the school.

Church-related secondary schools predominate among nonpublic schools in all regions of the country, but the percentage is highest in the Great Lakes and Plains States—92 and 95 percent, respectively. Non-church-related schools exert their greatest influence in the New England States, where "independent" schools make up 38.5 percent of the nonpublic secondary schools.

Boarding schools constitute 13 percent of all nonpublic secondary schools nationally. Day schools outnumber them in all regions of the United States, with their greatest predominance (80 percent) in the Great Lakes area. In New England just over 20 percent of the nonpublic high schools are boarding schools and almost 20 percent are combined boarding and day schools. Only in the Southwest, where a number of "open air" schools draw students from afar, is there as high a proportion of schools offering either boarding or combined facilities.

About three-fifths of the nonpublic schools are coeducational, and the other two-fifths are equally divided between boys' schools and girls' schools. In the Plains and Rocky Mountains regions, the proportion of coeducational schools rises to over three-fourths of all nonpublic high schools, compared to slightly under one-half in the New England region.

Church relationship

Among church-related schools, the largest number of schools (2,523) are affiliated with the Roman Catholic Church. However, their predominance is most pronounced around the large urban centers, such as New York, Philadelphia, Boston, Chicago, Detroit, and St. Louis. The States of New York and Pennsylvania have the largest number of Roman Catholic secondary schools—262 and 199 schools, respectively. These schools are of many types, ranging from the small, single-purpose college-preparatory academy to the comprehensive high school offering three or more different curriculums. They may

be associated with a parish, an entire diocese, or a particular religious community.

The next largest number of secondary day schools (282) are affiliated with the Seventh-day Adventist Church. In enrollment, however, the Adventist schools yield to the 108 secondary schools affiliated with the Protestant Episcopal Church. The next largest groups, which conduct from 20 to 70 schools each, are, in descending order, the Christian Reformed Church, the Lutheran churches (Missouri Synod, primarily), various Jewish organizations, the Society of Friends, Baptist churches, Methodist churches, and Presbyterian churches.

Smaller groups of secondary day schools exist through the efforts of the Mennonites, the Church of Christ, the Moravians, the Pilgrim Holiness Church, and about 38 other Christian denominations. Nine schools describe themselves as "Christian interdenominational."

Size of schools

The small school still predominates among nonpublic secondary schools: 57 percent enroll fewer than 200 students each, while less than 40 percent of the public schools are as small (see table 3). Conversely, 30 percent of the public high schools enroll 500 or more students, compared with 15 percent of the nonpublic schools.

The 4 percent of nonpublic high schools with a capacity of 1,000 or more students enroll over 20 percent of the students attending nonpublic high schools. In contrast, the 70.6 percent of the schools with fewer than 300 students enroll only 31.5 percent of the secondary students.

The school program

The great majority of nonpublic secondary schools concentrate on preparation for higher education. Almost 35 percent of the institutions responding to our question on curriculum offer only a college preparatory program; almost as many additional schools offer college preparatory plus 1 additional curriculum; and less than 0.5 percent, a mere 18 schools, offer vocational training only, including business. And 653 schools, or 16.6 percent of all schools surveyed, are comprehensive high schools with 3 or more curriculum choices.

The high proportion of straight college preparatory schools is in line with the history and tradition of nonpublic secondary education in the academies of the past. The specialization is further encouraged by the size and staff limitations of nonpublic schools and the high costs of expansion. Consequently, most of the independent and proprietary schools concentrate on the one program that has been their forte and best meets the requirements of their students. Other kinds of secondary education are left to the comprehensive private or the public schools.

The comprehensive nonpublic high schools are comparable in variety of curriculums to the large public high schools in similar urban areas. The variety of programs is determined by a diversified and sizable student body and a multiplicity of occupational opportunities as well as the financial support of a diocesan or areawide group of sponsors.

About 6 percent of the Nation's nonpublic high school students attend schools offering only a general curriculum (see table 4). In the Plains and Southwest regions the percentage receiving only a general education rises to 14 percent of the high school students but falls to 1.5 percent in New England, the traditional home of the "prep school."

Of the 3,426 secondary schools extending through the 12th grade, 2,871, or 84 percent, are accredited by 1 or

Table 1.—Percentage distribution of nonpublic secondary schools, by selected characteristics of school and by region, 1960–61

Region	Type of control		Type of facility			Type of student body		
	Church-related	Non-church-related	Day school only	Boarding school primarily	Combined boarding and day school	Boys only	Girls only	Coeducational and other
Total United States (50 States and D.C.)	80.6	19.4	70.7	13.2	16.1	19.9	20.8	59.2
New England	61.5	38.5	60.1	20.6	19.3	27.2	24.7	48.1
Mideast	77.4	22.6	74.7	11.3	14.0	24.5	24.9	50.6
Great Lakes	91.8	8.2	80.1	11.6	8.3	16.9	21.8	61.4
Plains	94.8	5.2	75.4	11.2	13.4	9.1	14.9	76.1
Southeast	74.3	25.7	65.3	13.5	21.2	18.9	16.0	65.1
Southwest	88.2	11.8	58.3	17.2	24.5	17.2	15.2	67.6
Rocky Mountains	87.2	12.8	69.8	10.5	19.8	10.5	14.0	75.6
Far West	79.5	20.5	66.7	11.9	21.4	23.1	23.3	53.6
Outlying parts	82.7	17.3	80.0	6.7	13.3	9.3	10.7	80.0

Percentage of total enrollment and teachers in nonpublic schools, by church relationship, 1960–61

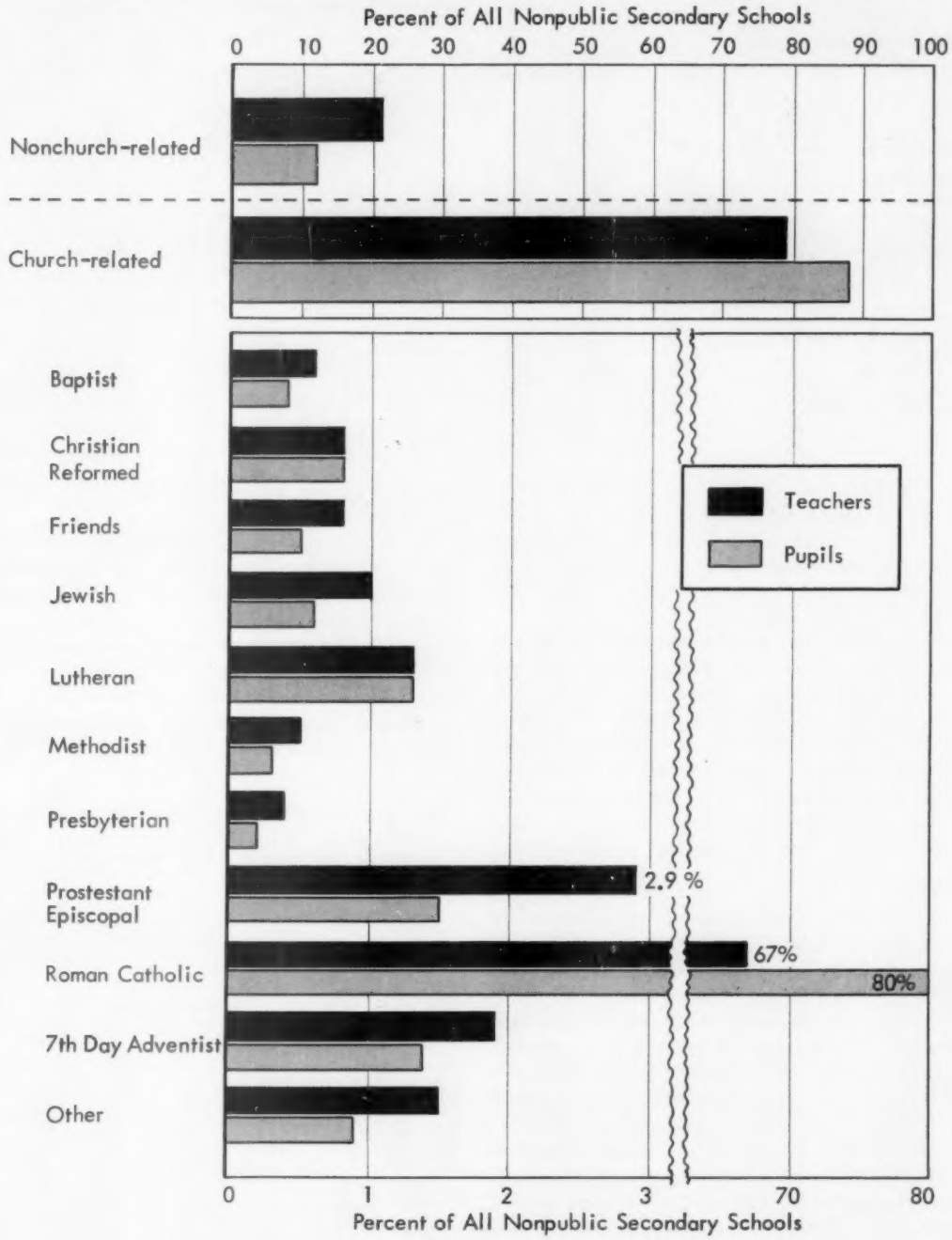


Table 2.—Church relationship of nonpublic secondary schools, by region, 1960–61

Church relationship of nonpublic schools	Number of schools, by region									
	Total	New England	Mideast	Great Lakes	Plains	Southeast	Southwest	Rocky Mountains	Far West	Outlying parts
All schools	4,053	486	1,001	735	464	657	204	86	420	75
Non-church-related	787	187	226	60	24	169	24	11	86	13
Church-related	3,266	299	775	675	440	488	180	75	334	62
Baptist	22	1	1	3	.....	13	2	.....	2	1
Christian Reformed	67	.....	2	38	8	6	2	2	9	.....
Friends	25	3	15	2	2	1	.....	1	1	.....
Jewish	46	3	36	4	.....	1	.....	.....	2	.....
Lutheran	64	1	6	19	21	4	3	3	7	.....
Methodist	22	2	4	1	2	8	4	.....	1	1
Presbyterian	20	.....	2	1	2	9	4	1	1	.....
Protestant Episcopal	107	19	26	6	7	29	6	2	12	1
Roman Catholic	2,523	258	635	551	371	317	130	48	213	57
Seventh-day Adventist	282	10	31	43	16	72	23	14	73	2
Other church-related	88	2	17	7	11	28	6	4	13	.....

more accrediting agencies. (Only schools with grades 9 through 12 are considered in this discussion of accreditation.) These schools enrolled 968,715 students, representing 91 percent of all students attending grade 9–12 schools and 87 percent of all students in nonpublic secondary schools during 1960–61.

In five States and one outlying area there are no unaccredited schools extending through grade 12; they are Alaska, Kansas, Nevada, New Mexico, Rhode Island, and the Virgin Islands; in Iowa, Massachusetts, Ohio, Pennsylvania, South Dakota, and Vermont fewer than 5 percent of such schools are unaccredited. In Maine and Wisconsin more than half of the nonpublic secondary schools are unaccredited; such schools enroll only about 40 percent of the nonpublic students in those States.

Enrollment

In the Nation as a whole, 8.5 percent of secondary school students are attending nonpublic schools (*see* table 5). Regionally, New England has by far the largest percentage of high school students in nonpublic schools (17.3 percent), and the Rocky Mountains and Southeast regions have the smallest percentage (3.8 percent). These percentages compare *secondary* enrollment in public and nonpublic schools. If the comparison were made for enrollment in grades 9–12 only, the proportion in nonpublic schools would be higher, because almost all the secondary enrollment in nonpublic schools is in grades 9 to 12 (97 percent in 1960–61), while only three-quarters of the secondary enrollment in public schools is in grades 9 to 12 (as of the fall of 1962). The junior high school movement has never taken hold to any great extent in nonpublic schools, and the traditional 4-year high school pattern is predominant.

The typical student of nonpublic secondary schools attends a church-related school as a day student and is as likely to attend a school for both boys and girls as he is to go to a school for boys only or girls only. He is most likely to attend a coeducational school if he is in the Rocky Mountains area and is least likely to do so in the Mideast or the Far West regions.

Although 88 percent of the nonpublic secondary students in the Nation attend the 81 percent of schools which

Table 3.—Comparison of the number and percent of public secondary schools in 1959 and nonpublic secondary schools in 1961, by size of student body

Size of student body	Public secondary schools, 1959 [1]		Nonpublic secondary schools, 1961 [2]	
	Number of schools	Percent of total	Number of schools	Percent of total
1–99	4,256	17.6	1,293	31.3
100–199	5,210	21.5	1,060	25.7
200–299	3,386	14.0	573	13.9
300–499	4,009	16.5	592	14.4
500–999	4,528	18.7	452	10.9
1,000–2,499	2,652	10.9	143	3.4
2,500 or more	185	0.8	15	0.4

[1] Includes 36 schools in Alaska but excludes the 58 public schools in Hawaii.
[2] Includes 50 States, District of Columbia, and outlying parts.

are church related, by region the percentage of nonpublic students in church-related schools ranges from 70 percent in New England to 96 percent in the Plains States. All of the nonpublic high school students in the following 6 States are enrolled in church-affiliated schools: Idaho, Iowa, Nevada, North Dakota, Utah, and Wyoming. In only two States are fewer than half of the nonpublic students enrolled in church-related schools: Maine (36.8 percent) and Georgia (42.8 percent). Other States with a relatively large proportion of students in non-church-affiliated schools are Connecticut, South Carolina, Tennessee, and Vermont.

Eighty percent of all secondary students in nonpublic schools are enrolled in Roman Catholic schools. Furthermore, Catholic schools enroll over half of the secondary students attending church-related schools in every State but one—North Carolina is the exception, with only 47 percent of its church-related nonpublic high school students in Catholic schools. Other States enrolling a relatively lower proportion of Catholic students to all church-related students are Alaska, South Carolina, and Virginia.

Students attending schools under the sponsorship of particular denominations are naturally concentrated in those geographic areas where a group of citizens is sufficiently interested to organize and finance schools. In 1960–61, for example, the largest groups of students in church-related schools were concentrated in these areas: Protestant Episcopal, in Virginia; Seventh-day Adventist, in California and the Pacific Coast States; Lutheran, in the Great Lakes region with the heaviest concentration in Wisconsin; Christian Reformed, in Michigan; Jewish, in New York, which had 80 percent of all high schools under Jewish sponsorship; and Friends, in Pennsylvania, which had almost 50 percent of the enrollment in schools sponsored by the Society of Friends.

Table 4.—Percentage of nonpublic secondary school students enrolled in schools with selected curriculums, by region, 1960–61

Region	General curriculum only	College preparatory curriculum only	College preparatory plus one other curriculum	Three or more curriculums (comprehensive)
Total U.S. (50 States and D.C.)	6.3	29.3	36.8	26.5
New England	1.5	37.1	26.0	35.2
Mideast	3.1	35.2	35 1	24.3
Great Lakes	9.0	17.9	35.8	36.3
Plains	13.7	18 7	47.7	19.8
Southeast	8.6	37.7	36.7	15.4
Southwest	13.8	35.4	34.5	15.7
Rocky Mountains	5.6	25.0	49.0	20.4
Far West	3.4	28.9	46.7	20 9

Table 5.—Percentage of secondary enrollment in nonpublic schools, by region and State, 1960–61

Region and State	Total secondary enrollment [1]	Secondary enrollment in nonpublic schools	Percent of enrollment in nonpublic schools
Total United States	13,040,805	[2] 1,109,443	8.5
New England	692,544	119,970	17.3
Connecticut	163,603	26,741	16.4
Maine [3]	59,481	10,596	17.8
Massachusetts	337,919	60,641	17.9
New Hampshire	40,414	6,913	17.1
Rhode Island [4]	63,494	8,944	14.1
Vermont	27,633	6,135	22.2
Mideast	2,956,662	350,486	11.9
Delaware	38,527	3,893	10.1
District of Columbia	48,469	7,826	16.1
Maryland	270,333	20,992	7.8
New Jersey	366,224	51,681	14.1
New York [4]	1,299,447	149,447	11.5
Pennsylvania	933,662	116,647	12.5
Great Lakes	2,483,510	273,278	11.0
Illinois	543,033	88,861	16.4
Indiana	294,322	20,287	6.9
Michigan	698,753	63,550	9.1
Ohio	704,102	65,280	9.3
Wisconsin	243,300	35,300	14.5
Plains	1,049,409	99,016	9.4
Iowa	214,750	18,291	8.5
Kansas	122,431	8,505	6.9
Minnesota	304,327	25,749	8.5
Missouri [3]	226,461	30,111	13.3
Nebraska	99,465	9,787	9.8
North Dakota [3]	41,092	3,826	9.3
South Dakota [3]	40,883	2,747	6.7
Southeast	2,939,650	112,216	3.8
Alabama [4]	351,295	6,361	1.8
Arkansas [4]	184,763	2,624	1.4
Florida	417,530	13,898	3.3
Georgia [5]	292 903	7,644	2.6
Kentucky	191,933	17,181	9.0
Lousiana	178,590	23,590	13.2
Mississippi	191,917	3,917	2.0
North Carolina [3]	265,608	3,498	1.3
South Carolina	209,525	3,757	1.8
Tennessee	200,651	9,908	4.9
Virginia	279,951	15,595	5.6
West Virginia	174,984	4,243	2.4
Southwest	890,440	36,244	4.1
Arizona [3]	75,656	5,281	7.0
New Mexico [4]	94,236	4,421	4.7
Oklahoma	225,243	3,664	1.6
Texas [3]	495,305	22,878	4.6
Rocky Mountains	406,205	15,459	3.8
Colorado	157,467	8,495	5.4
Idaho [4]	71,052	1,013	1.4
Montana [3]	50,475	3,856	7.6

Footnotes at end of table.

Table 5.—Percentage of secondary enrollment in nonpublic schools, by region and State, 1960–61—Con.

Region and State	Total secondary enrollment [1]	Secondary enrollment in nonpublic schools	Percent of enrollment in nonpublic schools
Utah	96,553	1,754	1.8
Wyoming [4]	30,658	341	1.1
Far West	1,622,385	102,774	6.3
Alaska	10,166	439	4.3
California	1,145,766	74,166	6.5
Hawaii [4]	65,741	8,213	12.5
Nevada	22,852	898	3.9
Oregon	125,701	7,544	6.0
Washington	252,159	11,514	4.6
Outlying parts	204,603	14,078	6.9
Guam	5,928	1,297	21.9
Puerto Rico	196,132	12,376	6.3
Virgin Islands [4]	2,543	405	15.9

[1] Samuel Schloss and Carol Joy Hobson, *Fall 1961 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools.* U.S. Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office, 1962. p. 10. Fall 1960 figures used for public school enrollment added to nonpublic school enrollment derived from current survey.

[2] Schools were instructed to report secondary enrollment in accordance with their organizational plan. Thus the grades included may range from 5 or 6 to 12.

[3] Data for public secondary schools include grades 9–12.

[4] Data for public secondary schools include grades 7–12.

[5] Data for public secondary schools include grades 8–12.

Teachers and pupil-teacher ratios

There are 58,927 teachers, both lay and religious, giving instruction in nonpublic secondary schools within the 50 States and the District of Columbia; of these, 21.2 percent teach in the 787 "independent" schools.

Since most nonpublic secondary schools are small, 76 percent of them have fewer than 20 teachers each. This percentage compares with the 80 percent of the schools which have fewer than 400 pupils each. Twenty-six schools have less than one teacher each as they are schools in which secondary grades are combined with some elementary grades. In such schools, known as intermediate schools or junior academies, a single teacher is responsible for instruction and occasionally for administrative and custodial services as well.

Each of 89 other nonpublic high schools (22 percent) employs between 50 and 100 teachers; of these, 40 schools are in the Mideast, 28 are in the Great Lakes area. Of all the States, Pennsylvania has the largest number of schools employing over 50 teachers—21 schools—and New York State the next largest number with 18 schools. Only 8 schools in the country, 7 church-related and 1 non-church-related, employ 100 or more classroom teachers: 3 are in the Mideast, 2 in New England, 2 in the Great Lakes region, and 1 in the Plains region. All are day schools.

Pupil-teacher ratios for all nonpublic secondary schools range from 7 pupils per teacher in Alaska to 26 pupils per teacher in Guam. The national average ratio in these schools has risen from 14 in 1932–33 to 15 in 1940–41 to 19 in 1960–61. Thus it may be seen that the workloads of classroom teachers are increasing in the nonpublic as well as the public high schools.

The pupil-teacher ratio is consistently lower in nonpublic schools as a whole than in public schools—the national ratio of 18.8 compares favorably with the 22.7 ratio reported in a similar 1959 study of public schools. In nonpublic schools the ratio varies considerably among the various types of schools: Non-church-related schools have a lower ratio in every State than church-related schools, and among the church-related schools the Roman Catholic schools have a higher ratio (22.4) than other church-related schools (12.8). Church-related schools other than Catholic have almost as low a pupil-teacher ratio as nonchurch schools (10.7) for the Nation as a whole.

A comparison of nonpublic secondary school teachers and enrollments in church-related and non-church-related schools shows that church-related schools have a larger percentage of the students and a smaller percentage of the teachers than non-church-related schools. This applies for the Nation as a whole as well as for each region (*see* chart).

Number of graduates

A total of 230,973 students were graduated from nonpublic secondary schools in the 50 States and the District of Columbia in the school year 1959–60. If these figures are related to the total number of high school graduates in the United States, it is found that the nonpublic secondary schools, representing 8.5 percent of all secondary enrollment, contributed 12.4 percent of all graduates. More than half of these graduates went on to higher education. The percentage of 1959 nonpublic school graduates going on to college ranges from 31.4 percent in Nevada (only two schools) and 40.7 percent in New Mexico to 73.1 percent in Connecticut.

More on the nonpublic school . . .

Nonpublic Secondary Schools: A Directory, 1960–61, showing accreditation status, enrollment, classroom teachers, and other data (OE–20043), by Diane B. Gertler and Leah W. Ramsey, Washington, U.S. Government Printing Office, 75 cents.

Preliminary Report on Offerings and Enrollments in Grades 9–12 of Nonpublic Secondary Schools, 1961–62 (OE–24008), by Diane B. Gertler, Washington, U.S. Government Printing Office. Free from the Office of Education.

Statistics of Nonpublic Secondary Schools, 1960–61: Type of School, Enrollment, and Staff (OE–20050), by Diane B. Gertler, Washington, U.S. Government Printing Office, 40 cents.

BONDS

for educational purposes

. . . sales, interest rates, et cetera . . .

PUBLIC SCHOOLS

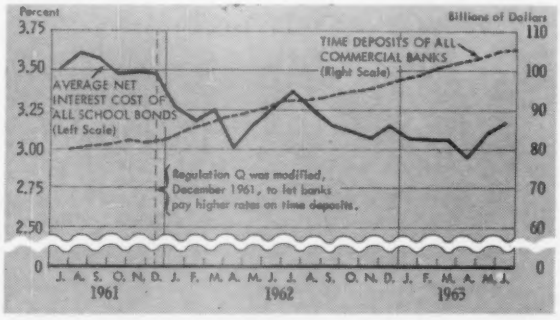
By ELMER C. DEERING, *specialist on the financing of school facilities, Division of Elementary and Secondary Education, Office of Education.*

SCHOOL BONDS, like other municipal bonds, have felt the effect of Regulation Q of the Federal Reserve System.

Under Regulation Q the Federal Reserve Board fixes the maximum interest rate that member banks may pay on time deposits. The Board applied it for the first time in November 1933 by setting the limit at 3 percent. In February 1935 the limit was lowered to 2.5 percent, where it remained for the next 22 years. In 1957 it was increased to 3 percent; in 1962, to 4 percent.

The increases in 1957 and 1962 have affected the amount of time deposits in commercial banks. Between December 31, 1956, and December 31, 1961, time deposits in these banks increased from $50.9 billion, to $82.4 billion, or at an annual rate of $6.3 billion. After the increase to 4 percent in January 1962, time deposits rose still faster; by June 30, 1963, they totaled $105.4 billion, which represents an annual increase, under the 4-percent limit, of $15.3 billion.

What effect have the increased time deposits had on the municipal bond market? During the last 18 months commercial banks have increased their holdings in tax-exempt municipal bonds. The greater demand for municipal bonds has driven prices up and, as a result, brought interest rates down. School bonds, which make up about a third of the municipal bond market, have shared in the effect, as the chart shows.



Average net interest cost of all school bonds, and time deposits of all commercial banks, by months, from July 1961 to June 1963

Average net interest cost of Moody-rated bonds sold on primary market for public schools, by rating only: Annual 1959–60 to 1962–63; monthly, August 1962 to August 1963

Period	Aaa	Aa	A	Baa	Ba	All rated bonds
1959–60	3.26	3.63	3.77	4.21	4.55	3.84
1960–61	2.82	3.34	3.43	3.75	3.97	3.48
1961–62	2.84	3.23	3.19	3.51	3.93	3.27
1962–63	2.64	2.86	2.99	3.29	3.72	3.03
1962						
August	.....	3.02	3.08	3.43	3.82	3.17
September	2.83	2.80	3.08	3.47	3.75	3.10
October	.....	2.75	2.96	3.16	3.84	3.02
November	2.38	2.73	2.88	3.17	3.22	2.90
December	2.56	2.73	2.99	3.27	3.86	3.06
1963						
January	2.53	2.79	3.00	3.28	3.78	3.02
February	2.68	2.77	3.00	3.25	3.73	2.99
March	2.47	2.76	2.93	3.22	3.61	3.00
April	2.73	2.87	2.91	3.21	3.53	2.92
May	.....	2.74	2.94	3.31	3.38	3.02
June	.....	2.99	3.04	3.36	3.58	3.14
July	.....	2.90	2.99	3.38	3.83	3.06
August	2.62	2.98	3.04	3.37	3.75	3.08

Source: Sales reported by The Daily Bond Buyer; ratings reported by Moody's Investors Service (rated bonds include 75 to 80 percent of all bonds for public schools).

Average net interest cost of Moody-rated bonds sold on primary market for public schools, by rating and by term of bond, for the latest quarter and month available

Term of bond	Aaa	Aa	A	Baa	Ba	All rated bonds
	Latest quarter (April–June 1963)					
Under 15 years	2.50	2.44	2.66	3.03	3.39	2.64
15–24 years	2.79	2.86	2.97	3.20	3.49	2.98
25 years and over	.....	2.96	3.00	3.41	3.72	3.12
All terms	2.73	2.88	2.95	3.30	3.55	3.00
	Latest month (August 1963)					
Under 15 years	2.62	2.48	2.73	.....	.....	2.64
15–24 years	.....	2.89	3.00	3.31	3.76	3.08
25 years and over	.....	3.00	3.22	3.44	3.73	3.11
All terms	2.62	2.98	3.04	3.37	3.75	3.08

Source: Sales reported by The Daily Bond Buyer; ratings reported by Moody's Investors Service (rated bonds include 75 to 80 percent of all bonds for public school purposes.)

COLLEGES AND UNIVERSITIES—

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During July 1963, the latest month for which full data are available at the time this issue goes to press, colleges and universities sold $85.6 million worth of bonds to finance buildings and other facilities: Public institutions sold $50.3 million; private, $35.3 million. Total sales were higher than in any other month in 1963 except March, when $50 million sold by the State of Illinois raised the month's total to $93.4 million. The average net interest rate on July sales favored public institutions, which will pay 3.36 percent; the average for private institutions was 3.40 percent. The average rate on all July sales was 3.37 percent.

Private institutions again relied principally on the college housing program of the Housing and Home Finance Agency (HHFA) to purchase their bonds. The only exceptions were two private institutions in New York State, which borrowed a total of $22.5 million from the Dormitory Authority of the State of New York. Except for these two sales in July and another in March for $5.6 million, also made to the Dormitory Authority of the State of New York, all bonds issued by private institutions in the first 7 months of 1963 were purchased by the HHFA.

During the first 7 months of 1963, private institutions had borrowed a total of $125 million through bond sales, not much less than the $126.7 million they borrowed in all of 1962.

Bond sales for publicly controlled and privately controlled institutions of higher education in the United States, by institution, July 1963

Institution	Amount sold (000)	Term	Average net interest cost	Use of funds [1]
PUBLIC INSTITUTIONS	$50,334	.....	3.36	
University of Arizona	480	1–20	3.31	Res.
	1,020	21–40	[2] 3.50	Do.
Abraham Baldwin Agricultural College	285	1–26	3.39	Instr.
Albany State College	450	1–26	3.39	Do.
Armstrong College	2,250	1–26	3.39	Do.
Fort Valley State College	475	1–26	3.39	Do.
Georgia Institute of Technology	2,750	1–26	3.39	Do.
Georgia Southern College	1,400	1–26	3.39	Do.
Georgia Southwestern College	350	1–26	3.39	Do.
Georgia State College	1,750	1–26	3.39	Do.
Middle Georgia College	500	1–26	3.39	Do.
North Georgia College	600	1–26	3.39	Do.
Savannah State College	450	1–26	3.39	Do.
South Georgia College	375	1–26	3.39	Do.
University of Georgia	4,000	1–26	3.39	Do.
Valdosta State College	250	1–26	3.39	Do.
West Georgia College	$600	1–26	3.39	Do.
University Building System Authority-Ga	3,515	1–26	3.39	Unassigned.
University of Hawaii	444	1–38	[2] 3.50	Res.
	437	1–36	[2] 3.00	Do.
University of Idaho	365	1–9	3.37	Res.-Din.
	2,665	10–39	[2] 3.38	Do.
Murray State College	64	1–9	3.37	Do.
	404	10–37	[2] 3.38	Do.
Northwestern Michigan College	815	1–39	[2] 3.38	Res.-Ctr.
Wayne University	238	1–18	3.48	Res.
	512	19–38	[2] 3.50	Do.
New York City University	1,000	1–20	2.94	Instr.
Kent State University	2,100	1–27	3.49	Res.
	1,400	28–37	[2] 3.50	Do.
Ohio University	1,450	1–24	3.49	Res.-Din.
	1,800	25–39	[2] 3.50	Do.
Oklahoma State University of Agriculture and Applied Science	680	1–20	3.45	Instr.
	1,520	21–40	[2] 3.50	Res.
University of Oklahoma	300	1–12	3.09	Do.
	1,550	1–20	3.28	Do.
	3,850	21–40	[2] 3.38	Do.
University of Rhode Island	185	1–9	3.37	Do.
	1,365	10–39	[2] 3.38	Do.
Lamar State College of Technology	219	1–14	3.35	Do.
	811	15–39	[2] 3.38	Do.
University of Texas	4,000	1–20	2.93	Instr.
Marshall University	200	1–29	[2] 3.38	Res.
Potomac State College	246	1–19	3.37	Do.
	214	20–29	[2] 3.38	Do.
PRIVATE INSTITUTIONS	35,299	.....	3.40	
Arkansas College	150	1–39	[2] 3.38	Din.
Andrew College	14	1–14	[2] 3.50	Res.
	247	15–39	[2] 3.38	Do.
University of Chicago	1,650	1–38	[2] 3.50	Res.-Din.
University of Dubuque	315	1–39	[2] 3.38	Ctr.
Kentucky Wesleyan College	560	1–49	[2] 3.38	Res.
Worcester Polytechnic Institute	1,073	1–39	[2] 3.38	Do.
St. Louis University	2,380	1–39	[2] 3.50	Do.
Tarkio College	250	1–39	[2] 3.50	Do.
Seton Hall University	1,600	1–28	[2] 3.50	Ctr.
New York University	17,600	1–32	[3] 3.38	Res.
Syracuse University	4,900	1–30	[3] 3.37	Do.
Chowan College	550	1–39	[2] 3.50	Do.
Wilberforce University	503	1–35	[2] 3.50	Res.-Din.
	127	36–39	[2] 3.38	Do.
Barrington College	280	1–39	[2] 3.38	Din.
Brown University	1,200	1–38	[2] 3.38	Res.
Fisk University	821	1–39	[2] 3.38	Do.
University of Dallas	794	1–40	[2] 3.38	Do.
Davis and Elkins College	285	1–28	[2] 3.50	Res.-Ctr.

[1] Abbreviations in this column indicate the following uses: Res, residential; Instr., instructional; Din., dining; Ctr, student center.

[2] Purchased by Community Facilities Administration, Housing and Home Finance Agency.

[3] Publicly financed (by the Dormitory Authority of the State of New York).

Bonds sold for higher education, July 1963: Number and amount of sales and average net interest cost, by type of institutional control type of financing, type of bond, and type of facility to be constructed

Type of financing, bond, and facility	Number of sales	Bonds sold		Average net interest cost (percent)
		Amount (000)	Percent of total	
PUBLIC INSTITUTIONS				
Type of financing:				
HHFA	15	17,457	34.7	3.42
Other	30	32,877	65.3	3.32
Type of bond:				
Revenue	44	49,334	98.0	3.36
General obligation	1	1,000	2.0	2.94
Type of facility:				
Academic: Instructional	18	22,165	44.0	3.29
Auxiliary	26	24,654	49.0	3.41
Residential	21	17,559	34.9	3.40
Residential-dining	4	6,280	12.5	3.44
Residential-student center	1	815	1.6	3.38
Unassigned	1	3,515	7.0	3.39
Total, public institutions	45	50,334	100.0	3.36
PRIVATE INSTITUTIONS				
Type of financing:				
HHFA	18	12,799	36.3	3.45
Other	2	22,500	63.7	3.38
Type of bond: Revenue	20	35,299	100.0	3.40
Type of facility:				
Auxiliary	20	35,299	100.0	3.40
Residential	12	30,389	86.1	3.39
Dining	2	430	1.2	3.38
Residential-dining	3	2,280	6.5	3.49
Student center	2	1,915	5.4	3.48
Residential-student center	1	285	.8	3.50
Total, private institutions	20	35,299	100.0	3.40
ALL INSTITUTIONS				
Type of financing:				
HHFA	33	30,256	35.3	3.43
Other	32	55,377	64.7	3.34
Type of bond:				
Revenue	64	84,633	98.8	3.38
General obligation	1	1,000	1.2	2.94
Type of facility:				
Academic: Instructional	18	22,165	25.9	3.29
Auxiliary	46	59,953	70.0	3.40
Residential	33	47,948	56.0	3.40
Dining	2	430	.5	3.38
Residential-dining	7	8,560	10.0	3.46
Student center	2	1,915	2.2	3.48
Residential-student center	2	1,100	1.3	3.41
Unassigned	1	3,515	4.1	3.39
Total, all institutions	65	85,633	100.0	3.37

ETV Grants Go to Five Agencies

The first five grants, totaling $858,952, have been made under the Educational Television Facilities Act of 1962 (for earlier reports on the act, P.L. 87–447, see *School Life*, June 1962, pp. 30–32, and July 1963, p. 3).

The projects aided will cost an estimated $1,292,460 and provide service for the first time or expanded service to areas with more than 9 million people, Secretary Celebrezze said in announcing the grants. The grants go to these associations and institutions:

The Chicago Educational Television Association, $299,619, to establish a new station on Channel 20 at Chicago; estimated cost, $399,492. The new station will make it possible for the association, which has operated Channel 11 for several years, to broadcast 30 hours a week of instructional programs to classrooms and to offer more diversified programs to a potential audience of 7 million. It will also serve parts of Indiana.

Hampton Roads, Va., Educational Television Association, $129,943, to acquire studio equipment for Channel 15 at Norfolk; estimated cost of the project, $173,258. The association owns a transmitter and tower but has had to depend on commercial studio facilities. Now it will be able to schedule programs regularly, reduce operating costs, and serve more school districts. The service area includes more than 800,000 people.

Utah State University of Agriculture and Applied Science, $99,865, to establish a new station on Channel 12 at Logan; estimated cost $143,908. The new station will serve the university, public schools, and the general public in an area where some 65,000 people are cut off from other channels by a mountain range.

South Carolina Educational Television Commission, $270,303, to establish a new station on Channel 29, at Greenville (estimated cost $457,358) and $59,222 to establish a new station on Channel 7 at Charleston (estimated cost, $118,444). The Greenville station will serve 366 schools and an area of approximately 850,000 people; the Charleston station will serve 111 schools and an estimated 239,000 people.

A $1.5 million appropriation under the act was made available in May 1963, and application forms were made available in early June. An additional $6.5 million has been made available for fiscal 1964. To date the Department has received 35 applications, including the 5 for the grants listed above; the other 30 are pending. The applications request more than $5.25 million in Federal funds. Copies of all applications are open to public inspection at the Office of the Director, Educational Television Facilities Program, U.S. Office of Education, Washington, D.C., 20202.

Persons interested in applying for a grant will find helpful information in *Educational Television Facilities Program: An Instructional Manual* (see Checklist, p. 40).

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The Educational Television Facilities Act of 1962, an explanation of Public Law 87–447, 1963, 8 pp., 10 cents (OE–34028).

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Report on the National Defense Education Act; Fiscal Years 1961 and 1962: A Summary of Programs Administered by the Office of Education Under Public Law 85–864, 1963, 126 pp., $1 (OE–10004–62).

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Programs, '63: A Guide to Programed Instructional Materials Available to Educators by September 1963, by Lincoln F. Hanson, Carol Christman, and Gertrude Seidel, 1963, 814 pp., $2.50 (OE–34015–63).

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Aerospace Periodicals for Teachers and Pupils, by Richard M. Harbeck, Rev. 1963, 8 pp. (OE–29010–63A).

Assignable Area of College and University Buildings, by Facilities Category, Function, and Type of Institution, by E. Eugene Higgins and M. Louise Stewart, April 1963, 4 pp., (OE–51004–16).

Bond Sales for Higher Education: 1962, by W. Robert Bokelman and Elmer C. Deering, May 1963, reprint from *School Life*, March 1963 (OE–52004–6).

Cooperative Research Program: Application Instructions for Research Contracts, 1963, 36 pp. (OE–12017).

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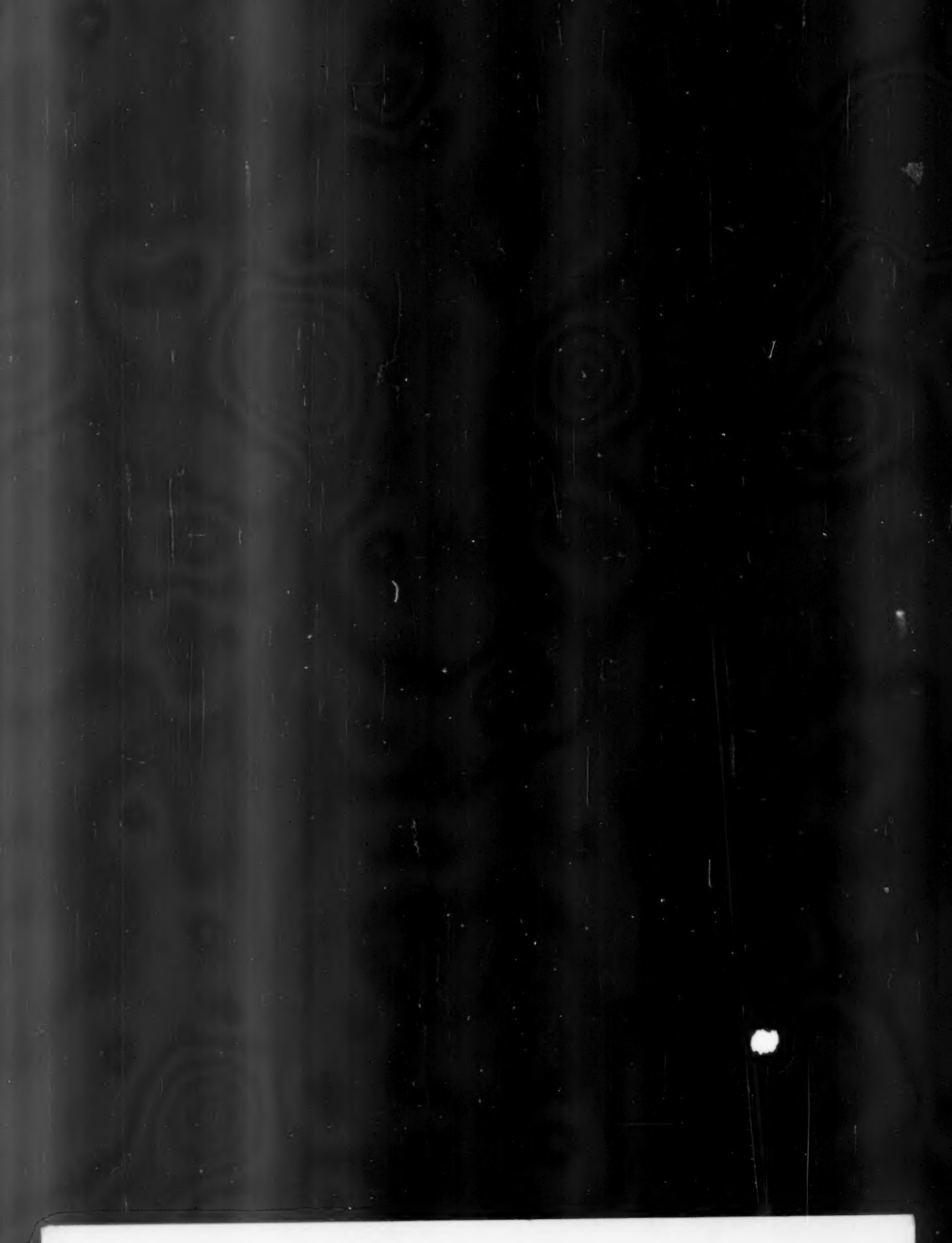
Educational Television Facilities Program, An Instructional Manual, 1963, 22 pp. (OE–34029).

More Teachers for Business Education, by Bruce I. Blackstone, May 1963, reprint from *School Life*, May 1963, 4 pp. (OE–86008).

NDEA and Higher Education, Report on Activities of the Four Higher Education Programs, June 1963, 8 pp. (OE–50024–6).

Preliminary Report of Financial Statistics of Institutions of Higher Education, 1961–62, Based on a Sample of Institutions, by the Higher Education Surveys Section, July 1963, 6 pp. (OE–52008).

Preliminary Report on Offerings and Enrollments in Grades 9–12 of Nonpublic Secondary Schools, 1961–62 by Diane B. Gertler, 1963, 17 pp. (OE–24008).

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